S
711.409
B15p
1967

PLEASE RETURN

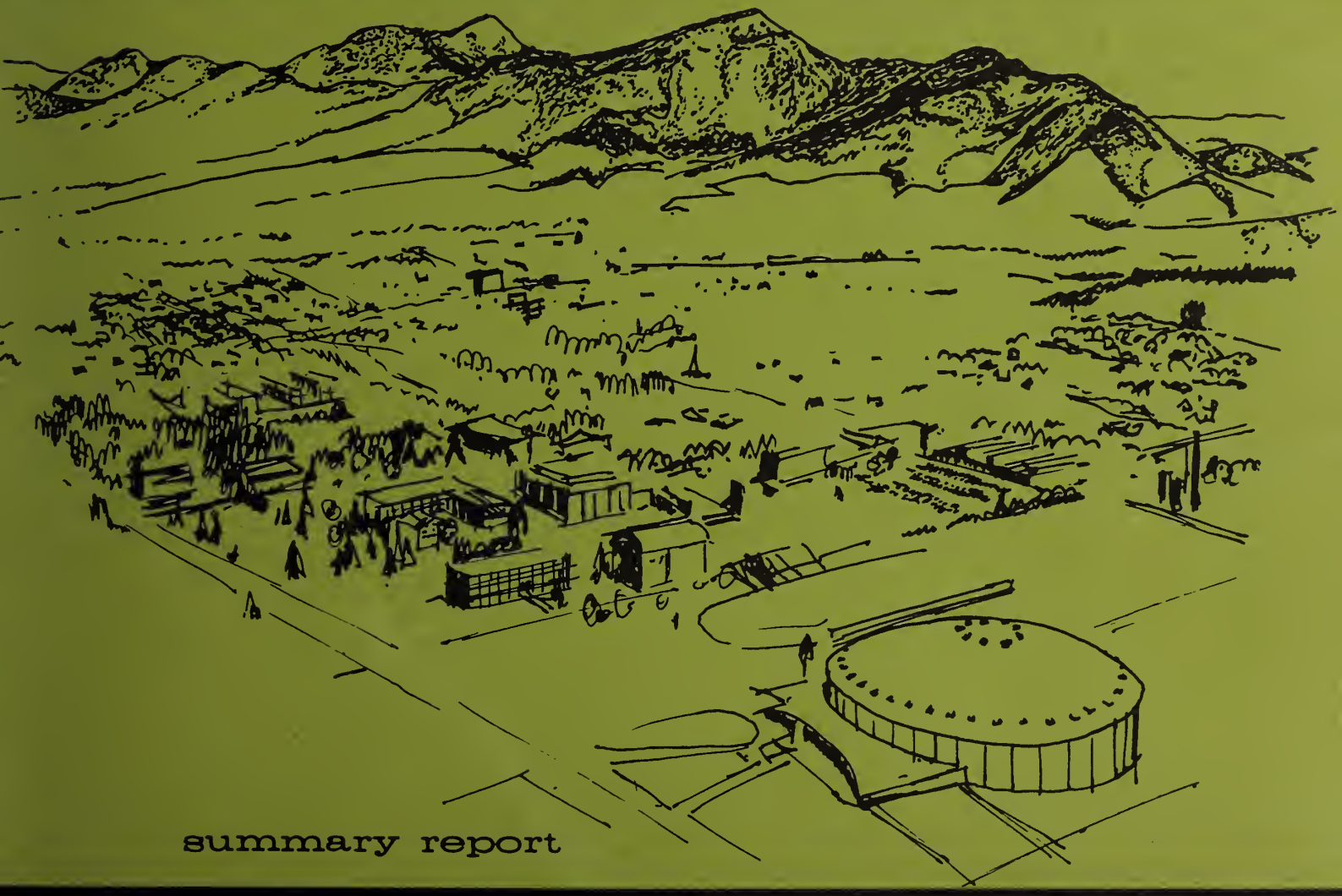
STATE DOCUMENTS COLLECTION

APR 12 1978

MONTANA STATE LIBRARY
930 E Lyndale Ave.
Helena, Montana 59601

PLANNING STUDIES

BOZEMAN MONTANA PLANNING AREA



summary report

consulting services corporation
theodore j. wirth & associates

MSU MAY 3 '78
AUG 23, 1995
Montana State Library
3 0864 1006 8655 2

BOZEMAN, MONTANA

CITY COMMISSIONERS

Mayor: Edmund P. Sedivy
Commissioners: Don M. Langohr, Jr., R. Harry Morrow

City Manager: Oscar E. Cutting
Assistant City Manager: Harold A. Fryslie

COUNTY COMMISSIONERS

Chairman: Ralph Armstrong
Vice Chairman: Leslie O. Anderson
C. L. Pasha

CITY-COUNTY PLANNING BOARD

President: H. D. Korslund
Vice President: H. C. Cheever
Secretary: Harold A. Fryslie

E. L. Bogart
Richard Boylan
Roman C. Fargo
Carroll V. Henderson
Frank E. Hoey
Harold Klumph
C. L. Pasha
H. C. Rose
Myron M. Westlake

PLANNING STUDIES

Bozeman, Montana, Planning Area

A SUMMARY REPORT

September 1967

Consulting Services Corporation
1602 Tower Building
Seattle, Washington

Theodore J. Wirth and Associates
1925 Grand Avenue
Billings, Montana

Project No. Montana P-13. Prepared under contract for the Montana State Planning Board and the Bozeman City-County Planning Board. Preparation of this report was financed in part through the Urban Planning Grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
EXISTING LAND USE, BOZEMAN JURISDICTIONAL AREA	3
The Inventory of Land Use	3
General Development	4
Analysis Areas	4
Land Use Classification	8
Bozeman Land Use	9
Implications	9
ARTERIAL STREETS PLAN, BOZEMAN PLANNING AREA	
The Historic Street and Traffic Problem	11
Goals and Objectives	12
Updating the Arterial Plan	14
The Arterial Streets Plan	14
Arterial Classification	19
The Freeway	20
Primary Arterials	22
Community Arterials	24
Collector Streets	30
Future Montana State University Traffic	33
Problem Intersection	34
Design Standards	36
Implementation	36
PARK PLAN - INTRODUCTION	
Scope	39
Basis for a Plan	42
Existing Parks and Future Needs	43
Financing	51
Recommendations	52
Capital Improvements Needs	63
Project Priority	66
ZONING MAP, PLANNING AREA OUTSIDE BOZEMAN	69

LIST OF TABLES

		Page
1	Existing Land Use Summary for Bozeman Jurisdictional Area Outside Bozeman	7
2	Recommended Thoroughfare Design Standards	36
3	Park Guidelines	44
4	Inventory of Bozeman's Existing Developed Parks	47
5	Bozeman's Undeveloped Parkland	49

LIST OF FIGURES

1	Existing Land Use - Bozeman Jurisdictional Area	5
2	Analysis Areas	6
3	Arterial Streets Plan - Bozeman Planning Area	15
4	Arterial Streets Plan - City of Bozeman	17
5	Estimated 1985 Average Daily Traffic - Interstate 90 and East and West Interchanges at Bozeman	26
6	One Way Couplets	26
7	One Way Couplets Detail	28
8	Proposed Intersection	35
9	Right-of-Way Illustrations	37
10	Bozeman's Parkland Needs	46
11	Existing and Proposed Parks for the City of Bozeman	53
12	Proposed Park and Conservation Areas for the Jurisdictional Area	55
13	Proposed Zoning Map - Planning Area Outside Bozeman	71

PLANNING STUDIES

BOZEMAN, MONTANA, PLANNING AREA

INTRODUCTION

The Importance of Planning

Every family, every business, every community must determine its present and future needs and must allocate or conserve its resources to meet those needs. Thus, by preparing a plan, a community can coordinate its activities and allocate its resources for maximum long-term benefits as compared with limited short-term results. Since most of these resources are provided by residents through taxes, officials and citizens both have a keen interest in their most efficient use.

The interests of citizens in community planning extend beyond the efficient use of their taxes, however. The kind of environment that the Bozeman area affords its residents is an even more basic interest of citizens in their community's plan. Will the plan help to create or encourage beauty and inspiration as well as efficiency? Will it increase safety for children as well as improve traffic flow for vehicles? Will it provide open spaces and places to relax and play as well as room for industry and employment? Citizens should be interested in these and similar questions, which suggest either a deteriorating environment or a pleasant and satisfying one.

The citizen should be aware of what the plan proposes to do to prevent as well as to solve problems. He should keep in mind that it is intended to uphold the public interest, rather than narrow or selfish interests. And, finally, he should conceive of planning as a continuing process of re-evaluation and refinement, as changing conditions in the community may require.

Purpose and Scope

A city planning report was prepared for the City of Bozeman in 1958. This planning report did not include a land use plan for the city (except as a zoning map), nor a Comprehensive Plan map for the city. The "Master Plan" map presented in the report includes only the Street Plan. This report was the first step toward development of a Comprehensive Plan for the Bozeman planning area.

In a series of reports prepared in 1960, a consultant reviewed and made recommendations on the Major Streets Plan; and prepared recommendations for a county zoning resolution, revision of the subdivision ordinance, and establishment of procedures for subdivision review.

The purpose of the present planning studies is to provide guides for planning of the jurisdictional area of the Bozeman City-County Planning Board as well as the city so that future development in the city and surrounding county can be coordinated and to continue progress toward a Comprehensive Plan for the entire community.

The scope of the present studies includes extension of the Land Use Survey to encompass the jurisdictional area, further updating of the Arterial Streets Plan for the planning area, drafting of a zoning map for the jurisdictional area outside Bozeman, and preparation of a Capital Improvements Program for the city. This report includes the Comprehensive Plan elements of the Land Use Survey, Arterial Streets Plan and the Parks Plan, followed by the Zoning Map for the planning area outside Bozeman. The Capital Improvements Program is presented in a separate report.

Together with the 1958 report and the series of reports prepared in 1960, the current reports (1967) contain a great deal of background data and research material which could be utilized in the development of a complete Comprehensive Plan for the planning area. The following studies or plan elements remain to be completed:

An Economic Study and Forecast
A Population Study and Forecast
A Land Use Plan
A Public Facilities Plan
A Comprehensive Plan to coordinate all of the plans
Revised Subdivision Regulations
A Review of Zoning and its Administration as they relate to the plan

EXISTING LAND USE
BOZEMAN JURISDICTIONAL AREA

Digitized by the Internet Archive
in 2017 with funding from
Montana State Library

https://archive.org/details/planningstudiesb1967cons

EXISTING LAND USE
BOZEMAN JURISDICTIONAL AREA

The land use survey and its tabulation are important planning tools for understanding the structure and functioning of an urban or urbanizing area. Insight into present problems can be found by mapping the distribution of land use by type or category and by measuring and quantifying the land area for each category.

The land use map resulting from the survey of the Bozeman jurisdictional area shows the locational pattern and the extent of land used for various activities as they have developed in the area surrounding the city.

The Inventory of Land Use

All land area has been classified within categories which describe the actual use or activities which are taking place on the land. The major categories are residential; business; industrial; transportation, communications and utilities; public and semi-public buildings (such as schools, government offices, or churches); open space (such as parks, cemeteries, agriculture, or vacant land); and streets and highways (which link together the various land uses). To allow more detailed analysis, these categories were broken down into sub-categories.

The land use inventory classified the use of each parcel of land within the jurisdictional area outside the city on the basis of a field survey. Field maps covering one square mile each were prepared, and the land uses entered on the field maps from aerial photographs. Each map was then checked in the field to determine the accuracy of the aerial photo interpretation and the exact use of business or industrial parcels which could not be determined from the aerial photographs. After final field checking, the information was transferred to a wall map according to a color code which identifies 13 categories or sub-categories of land use.

The land area in each type of land use was measured by the use of a transparent grid overlay and checked against measurements made with the use of a planimeter. In order to make the tabulation of land area more meaningful, the jurisdictional area was divided into seven analysis areas, and the land uses for each analysis area were summarized separately.

General Development

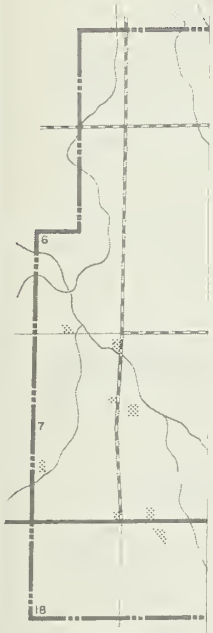
A generalized map of existing land use in the Bozeman City-County Planning Board jurisdictional area is illustrated on figure 1. The map shows some tendencies in the development pattern which have been and will continue to be influential in the location of future development. The most outstanding finding of the land use survey is that only a very small amount of land can be considered as developed. Of the 75 square mile area being studied, only 5.3 percent is developed, including all the area in streets and highways. Residential land accounts for less than 2 percent of the total land area; and streets, highways, and railroads account for less than 3 percent. The remaining 94 percent of undeveloped land is vacant, wooded, or agricultural land, with 92 percent of the total in agricultural use.

The residential locational pattern is also indicated by the land use analysis. Except for the mountainous area to the northeast, residences are scattered throughout the jurisdictional area. Clustering or concentration of residences generally occurs only within a mile of the city: to the south along Sourdough Road, to the north along Bridger Canyon Road, to the west between U. S. 191 and Durston Road, and directly south of Montana State University. A smaller cluster of homes exists about three miles east of Bozeman, just south of the freeway.

Analysis Areas

The tabulation of existing land use is summarized on table 1 for the analysis areas shown on figure 2.

Of the seven analysis areas, the north area is the most developed. This area contains 30 percent of the developed land. This is approximately twice the amount of development in each of the next three most developed areas; the south has 16.3



FIG

The land area in each type of land use was measured by the use of a transparent grid overlay and checked against measurements made with the use of a planimeter. In order to make the tabulation of land area more meaningful, the jurisdictional area was divided into seven analysis areas, and the land uses for each analysis area were summarized separately.

General Development

A generalized map of existing land use in the Bozeman City-County Planning Board jurisdictional area is illustrated on figure 1. The map shows some tendencies in the development pattern which have been and will continue to be influential in the location of future development. The most outstanding finding of the land use survey is that only a very small amount of land can be considered as developed. Of the 75 square mile area being studied, only 5.3 percent is developed, including all the area in streets and highways. Residential land accounts for less than 2 percent of the total land area; and streets, highways, and railroads account for less than 3 percent. The remaining 94 percent of undeveloped land is vacant, wooded, or agricultural land, with 92 percent of the total in agricultural use.

The residential locational pattern is also indicated by the land use analysis. Except for the mountainous area to the northeast, residences are scattered throughout the jurisdictional area. Clustering or concentration of residences generally occurs only within a mile of the city: to the south along Sourdough Road, to the north along Bridger Canyon Road, to the west between U. S. 191 and Durston Road, and directly south of Montana State University. A smaller cluster of homes exists about three miles east of Bozeman, just south of the freeway.

Analysis Areas

The tabulation of existing land use is summarized on table 1 for the analysis areas shown on figure 2.

Of the seven analysis areas, the north area is the most developed. This area contains 30 percent of the developed land. This is approximately twice the amount of development in each of the next three most developed areas; the south has 16.3

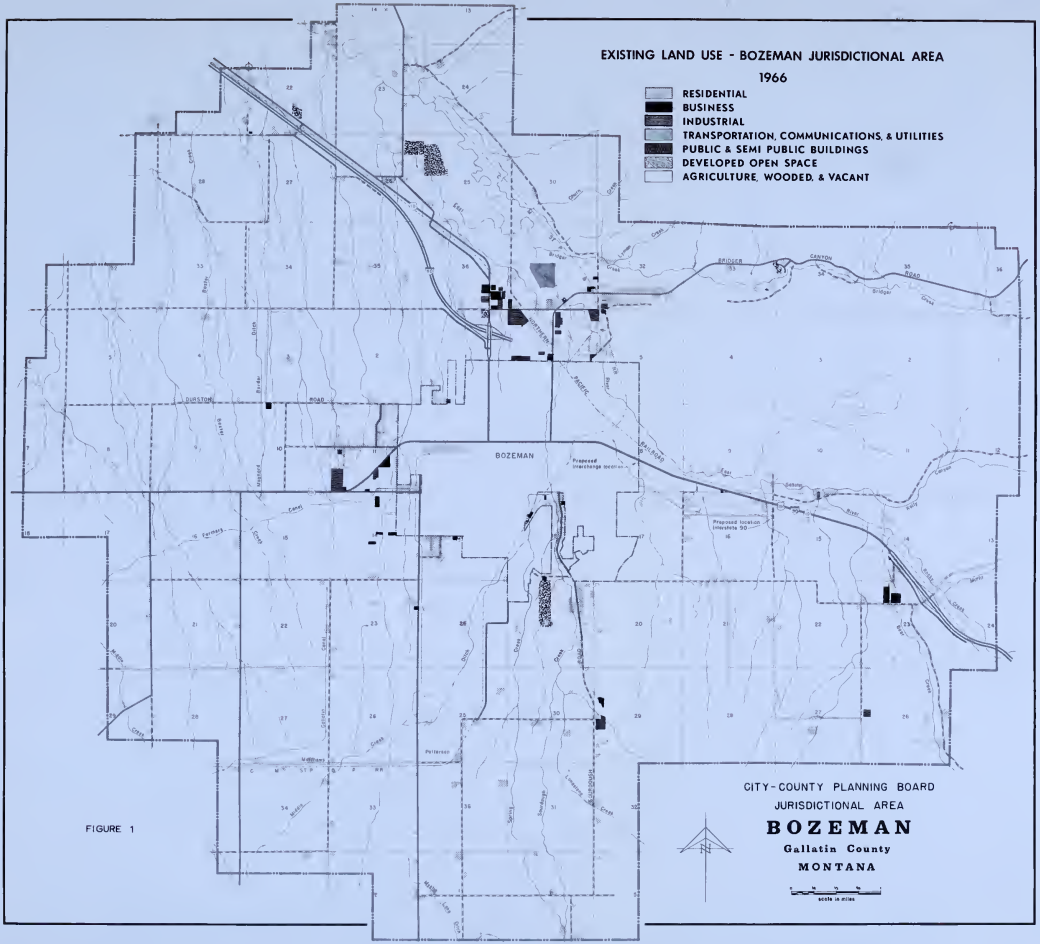

EXISTING LAND USE - BOZEMAN JURISDICTIONAL AREA
1966
RESIDENTIAL
BUSINESS
INDUSTRIAL
TRANSPORTATION, COMMUNICATIONS, & UTILITIES
PUBLIC & SEMI PUBLIC BUILDINGS
DEVELOPED OPEN SPACE
AGRICULTURE, WOODED, & VACANT
BOZEMAN
Proposed interchange location
Proposed location Interstate 90
DURSTON
BRIDGER CANYON ROAD
CITY-COUNTY PLANNING BOARD
JURISDICTIONAL AREA
BOZEMAN
Gallatin County
MONTANA
scale in miles

FIGURE 1

BOZEMAN JURISDICTIONAL AREA

—·— Analysis Areas

▒▒▒ City of Bozeman

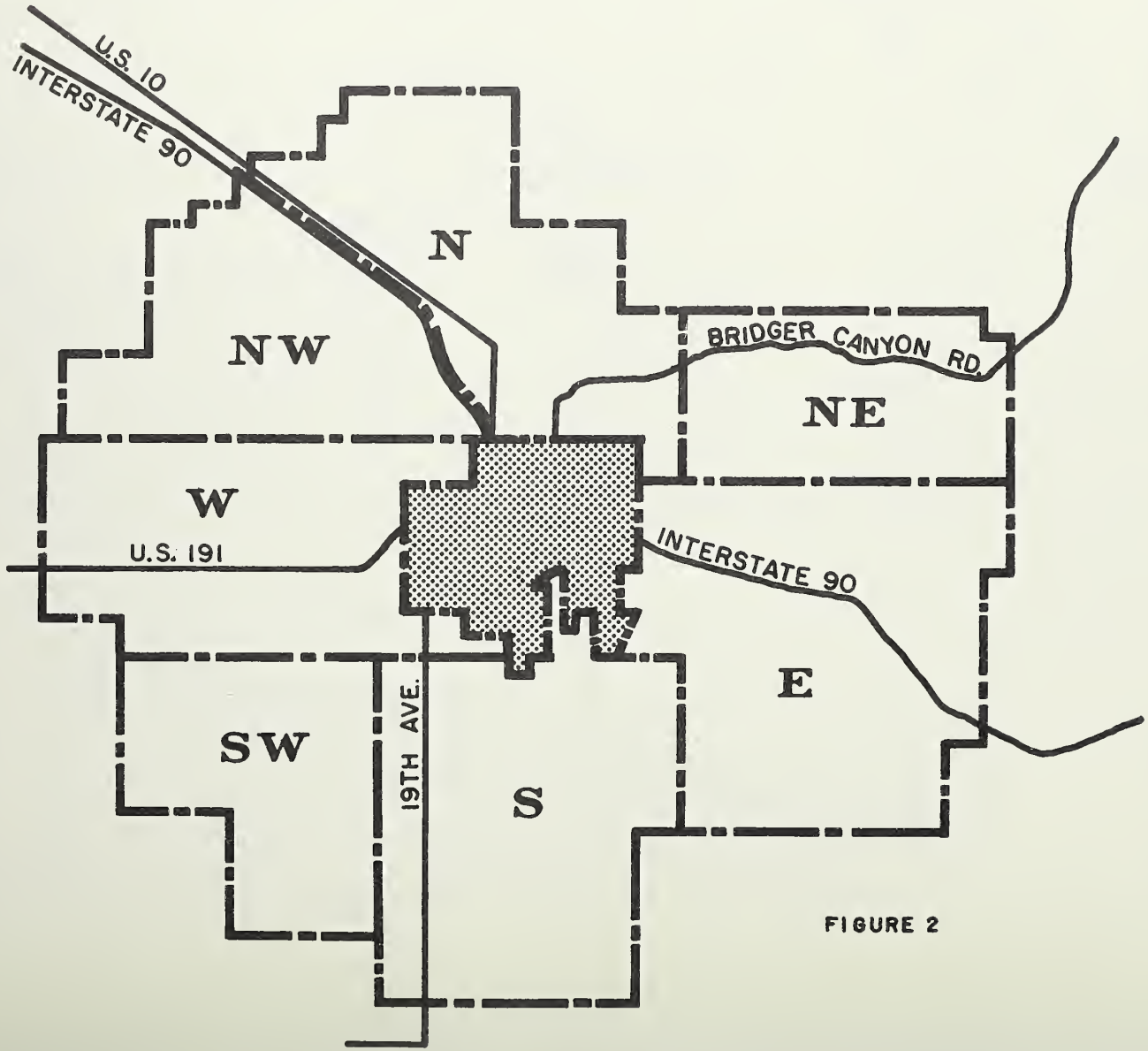


FIGURE 2

Table 1

Land Use Summary for Bozeman Jurisdictional Area Outside Bozeman
Existing Land Use (in Acres)

Analysis Area	Total Area (Acres)	Residential		Business		Industrial		Trans. Com. & Util. Inc.RR	Public & Semi-Public Bldgs.	Open Space				Streets, Highways
		Single Family	Other	Retail	Service & Office	Mfg.	Non-Mfg.			Parks & Other Devel. Open Space	Vacant	Wooded	Agri-culture	
Northwest	6,032.0	64.8	--	--	--	--	--	--	1.2	--	--	--	5,759.5	206.5
North	6,878.0	176.8	10.4	11.6	11.6	6.4	55.6	125.2	1.2	80.0	32.4	--	6,077.7	289.1
Northeast	4,832.0	24.8	3.2	--	--	--	--	--	--	5.2	--	940.8	3,805.0	53.0
West	6,952.0	194.8	8.8	6.8	1.2	--	25.2	4.1	12.8	--	36.0	--	6,524.5	137.8
Southwest	5,220.0	70.4	--	--	--	--	--	10.6	--	--	--	31.2	4,996.6	111.2
South	8,418.8	160.4	1.2	3.6	--	--	4.8	29.0	1.2	42.4	121.2	117.6	7,767.6	169.8
East	9,534.4	121.6	3.6	--	--	2.4	5.6	29.6	16.0	--	36.0	154.0	8,937.7	227.9
Total All Areas	47,867.2	813.6	27.2	22.0	12.8	8.8	91.2	198.5	32.4	127.6	225.6	1,243.6	43,868.6	1,195.3
% of Total	100.0%	1.70%	.06%	.05%	.03%	.02%	.19%	.40%	.07%	.27%	.47%	2.60%	91.65%	2.49%
% Developed	5.28%													

Percent of Total Developed Area in Each Category

	% of Developed Area													
Northwest	10.8%	8.0%	--	--	--	--	--	--	3.7%	--				17.3%
North	30.3	21.7	38.2%	52.7%	90.6%	72.7%	61.0%	63.0%	3.7	62.7%				24.2
Northeast	3.4	3.0	11.8	--	--	--	--	--	--	4.1				4.4
West	15.5	23.9	32.4	30.9	9.4	--	27.6	2.1	39.5	--				11.5
Southwest	7.6	8.7	--	--	--	--	--	5.3	--	--				9.3
South	16.3	19.7	4.4	16.4	--	--	5.3	14.6	3.7	33.2				14.2
East	16.1	15.0	13.2	--	--	27.3	6.1	15.0	49.4	--				19.1
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				100.0%

percent, the east has 16.1 percent, and the west has 15.5 percent of total development. The northwest and southwest areas follow in amounts of development. The steeply sloping northeast area, having only 3.4 percent of total development, is the least developed of all areas. The northeast area has only one-tenth as much development as the north analysis area.

Although residential growth has occurred in all areas, 45 percent of single family residential and 70 percent of other residential growth has developed in two analysis areas--the west and the north. The north analysis area contains 53 percent of the land devoted to retail business and 91 percent of the land in services, by far the largest amount of existing business development. This same analysis area also has the lion's share of existing industrial and transportation, communications and utilities (TCU) development. A mixture of industrial and residential uses is found north of the city between U. S. 10 and the Milwaukee railroad tracks.

The small amount of public and semi-public buildings in the jurisdictional area is unevenly distributed. The east analysis area has 50 percent of the total because it contains the Academy. Forty of the remaining 50 percent of public and semi-public buildings are located in the west analysis area. These are primarily buildings belonging to the Montana State University and a non-profit research foundation.

Unlike most public and semi-public buildings, which are distributed to the east and west, parks and other developed open space are distributed primarily to the north and south. The north area again has the major share, with a golf course and two cemeteries. The only other area with a major amount of open space is the south area which contains a golf course.

Land Use Classification

In order to insure that the 1966 land use for the jurisdictional area would be comparable with the 1957 land use map of the city, the 1957 land use categories were examined. It was found that they had been inconsistently applied. For example, motels were sometimes classified as "transitional" and at other times shown as "retail business." Most churches and a hospital were colored "public," while the county fairgrounds were classified "semi-public."

Bozeman Land Use

It became evident that a new land use map for the city would have to be prepared. The Planning Commission inserted the land uses on new field maps for the city, updating the 1957 land use survey in the process. The updated field maps were used by the consultant to complete a new city land use map, using the new land use categories selected for the jurisdictional area map.

The new colored city land use map was presented separately for reference by the City-County Planning Board. It has since been measured and statistically summarized by the Bozeman City Engineering Department. Although the city data were used in updating the arterial plan and preparing the zoning map for the planning area outside Bozeman, they are not included in this report.

Implications

What does this study and analysis mean?

There are several implications of these data for planning and zoning:

1. The small amount of land that is developed outside Bozeman implies that there are very broad alternatives for planning --the land is wide open to careful plans and determinations about what can be and what should be developed. There is still flexibility to guide development to what is desired, if the desirable can be defined. A land use plan for the entire planning area should be prepared, based on stated objectives.

2. The zoning of uses where they now exist outside the city presents few problems of land use conflicts, except for the mixture of residential, industrial, and railroad land north of the city. Allowance for reasonable expansion of existing development is also feasible.

3. If zoning is restricted to present types of uses (including allowance for expansion) to protect them from intrusions of undesirable uses, there will be many requests over the years for zoning changes. The Planning Board and

legislative bodies will not have a comprehensive plan as a guide to what should and what should not be allowed and where. Present zoning administration problems will be multiplied.

4. To provide a meaningful basis for land use planning, present land use would have to be combined with population and economic studies and forecasts to produce a forecast of future land use needs. This kind of study and the preparation of a land use plan have been recommended to the Planning Board.

ARTERIAL STREETS PLAN
BOZEMAN PLANNING AREA

ARTERIAL STREETS PLAN

BOZEMAN, MONTANA, PLANNING AREA

SETTING THE GOALS

The Historic Street and Traffic Problem

The street system in Bozeman basically faces the same problems common to cities across the United States. The streets were developed originally as local access streets serving the land uses along them. In early subdivision plats, streets were designed only with regard to serving uses within the subdivision, and little thought was given to tying the streets in to the existing system, nor to the effect of increased traffic on the surrounding streets. Horse and buggy traffic was slow and the gridiron street pattern, while not the best even for pre-automobile traffic, presented few difficulties to moving traffic. If the gridiron pattern had been evenly and consistently applied, traffic problems would be fewer today. Breaks in the grid at Main Street created the jogs in many north-south streets which impede efficient traffic movement.

While street widths have changed very little since Bozeman's early days, the use of streets has changed a great deal. Main Street and a portion of North Seventh Avenue excepted, arterial street capacity in Bozeman has not been appreciably enlarged since the arrival of the automobile. In many places it has actually become smaller. Unlike a water line which retains the capacity to carry a certain amount of water, regardless of use, the capacity of a street can be appreciably lowered by increasing use. Demands for parking, curb cuts for access to adjacent land uses, stop signs and signalization required to regulate increasing numbers of vehicles and the conflict between cars and pedestrians all lower the capacity of a street. Even today, because of the high cost and many variables which are difficult to predict, adequate provision for future traffic needs is seldom provided in the platting or construction of new streets.

With only a small amount of public transportation in the state, Montana residents are very automobile oriented. Since World War II the number of vehicles has increased dramatically, and at a rate greater than increases in population. Because of its

proportionately large and rapidly increasing number of young people, Bozeman will experience large increases in the number of automobiles in the future. Plans must be formulated which anticipate future pressures on street use and allow the circulation system to absorb and channel future traffic volumes so that people and goods can be moved quickly, conveniently, safely and economically between all points within the city and the jurisdictional area.

Goals and Objectives

To be effective, the arterial system must provide maximum freedom of traffic movement with a minimum of interference to adjacent areas and land use activities. It should link areas of related functions within the community with each other and provide efficient connection with other areas of the county and the surrounding region. It should provide for the transport of people and goods by means appropriate to the nature of each trip.

Streets are also valuable to the physical environment for reasons which are not based on traffic movement; they provide a conduit for all utilities, light and air to adjacent buildings, opportunities for landscaping, and they may be used to define elementary school service areas, neighborhoods, business and industrial districts.

The Arterial Streets Plan for the Bozeman Planning Area seeks to accomplish the following goals or objectives:

1. Separate conflicting street functions. Fast traffic should be separated from slow traffic; moving traffic from parking and loading; pedestrian traffic from automobiles; commercial traffic from residential traffic, local from through traffic, etc.

2. Provide buffers between residential, commercial and industrial activities. Arterial streets should separate or isolate conflicting or incompatible land uses and activities from each other.

3. Through traffic should be routed around residential, commercial, and industrial areas for maximum safety and efficiency. Arterials should serve these neighborhoods and districts on the periphery rather than split them.

4. Arterials should work in harmony with other streets to form an integrated system or network. The city street system should be coordinated with the state and county systems.

5. Arterials should be integrated with other transportation networks and their terminals, so that conflicts between railroad trains, trucks, automobiles and pedestrians are reduced or eliminated.

6. Thoroughfares and streets should be classified and designed according to their function.

7. On major thoroughfares, intersections should be limited to the minimum number needed for accessibility and convenience.

8. Roadways should be planned so as to avoid creation of small pockets of land for which there is no suitable use.

9. Thoroughfares should be planned and improved to serve projected traffic needs.

10. Arterials should be planned to the best possible engineering standards and practice in order to assure effectiveness, safety, efficiency and economy.

11. Timing of arterial street improvements should be coordinated with other private and public improvements.

12. Arterial street improvements costs should remain within the community's ability to pay, making the most use of the traffic carrying capacity of present streets, to the extent not inconsistent with other goals.

THE ARTERIAL STREETS PLAN

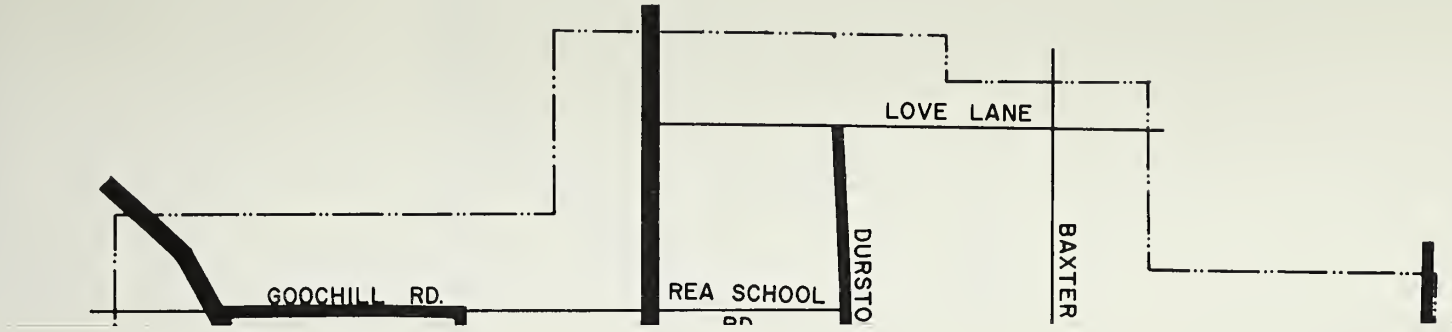
Updating the Arterial Plan

The arterial streets plan adopted by the Bozeman City Council in July 1958, was prepared by S. R. DeBoer & Company. A later review of the plan was made by L. C. Gerckins in 1960 and a new plan proposed, but never adopted. Both plans were examined in terms of estimated future traffic volumes and only those proposals in the previous plans which chould be justified by foreseeable growth were considered for inclusion in this plan. Some proposals in each plan were found to be excellent. However, although the arterial plan proposed here incorporates these ideas, it is basically not a patchwork of previous plans, but the result of the independent analysis of existing land use, past and present traffic flows and forecasted volumes of future traffic.

The Arterial Streets Plan

Planning for an arterial street system is not a simple matter. Volumes of information, described in the preliminary Arterial Streets Plan report, were gathered and analyzed. In the analysis, problems were identified by the comparison of the amount of traffic forecasted with the capacities of the streets to handle the traffic. Where the analysis pointed to potential overloads of vehicles, congestion and costly delays may be expected unless relief is provided. One way of relieving an excess of traffic is by increasing the street's capacity through widening or improvement such as has been done with Main Street and North Seventh, or by prohibiting parking to make full use of the street. The other way is by providing alternative routes which will take people where they want to go on other routes than the overcrowded streets.

The plan includes traffic engineering solutions which will make the best use of existing streets. It includes short-, intermediate- and long- range solutions to various problems. Basically, it proposes a complete system interlinking the freeway, major arterials, collector streets and local service streets. The complete system will not be in operation until it is completely constructed. However, the most essential elements of the system can be built


LOVE LANE
GOOCHILL RD.
REA SCHOOL
DURSTO
BAXTER

THE ARTERIAL STREETS PLAN

Updating the Arterial Plan

The arterial streets plan adopted by the Bozeman City Council in July 1958, was prepared by S. R. DeBoer & Company. A later review of the plan was made by L. C. Gerckins in 1960 and a new plan proposed, but never adopted. Both plans were examined in terms of estimated future traffic volumes and only those proposals in the previous plans which chould be justified by foreseeable growth were considered for inclusion in this plan. Some proposals in each plan were found to be excellent. However, although the arterial plan proposed here incorporates these ideas, it is basically not a patchwork of previous plans, but the result of the independent analysis of existing land use, past and present traffic flows and forecasted volumes of future traffic.

The Arterial Streets Plan

Planning for an arterial street system is not a simple matter. Volumes of information, described in the preliminary Arterial Streets Plan report, were gathered and analyzed. In the analysis, problems were identified by the comparison of the amount of traffic forecasted with the capacities of the streets to handle the traffic. Where the analysis pointed to potential overloads of vehicles, congestion and costly delays may be expected unless relief is provided. One way of relieving an excess of traffic is by increasing the street's capacity through widening or improvement such as has been done with Main Street and North Seventh, or by prohibiting parking to make full use of the street. The other way is by providing alternative routes which will take people where they want to go on other routes than the overcrowded streets.

The plan includes traffic engineering solutions which will make the best use of existing streets. It includes short-, intermediate- and long- range solutions to various problems. Basically, it proposes a complete system interlinking the freeway, major arterials, collector streets and local service streets. The complete system will not be in operation until it is completely constructed. However, the most essential elements of the system can be built

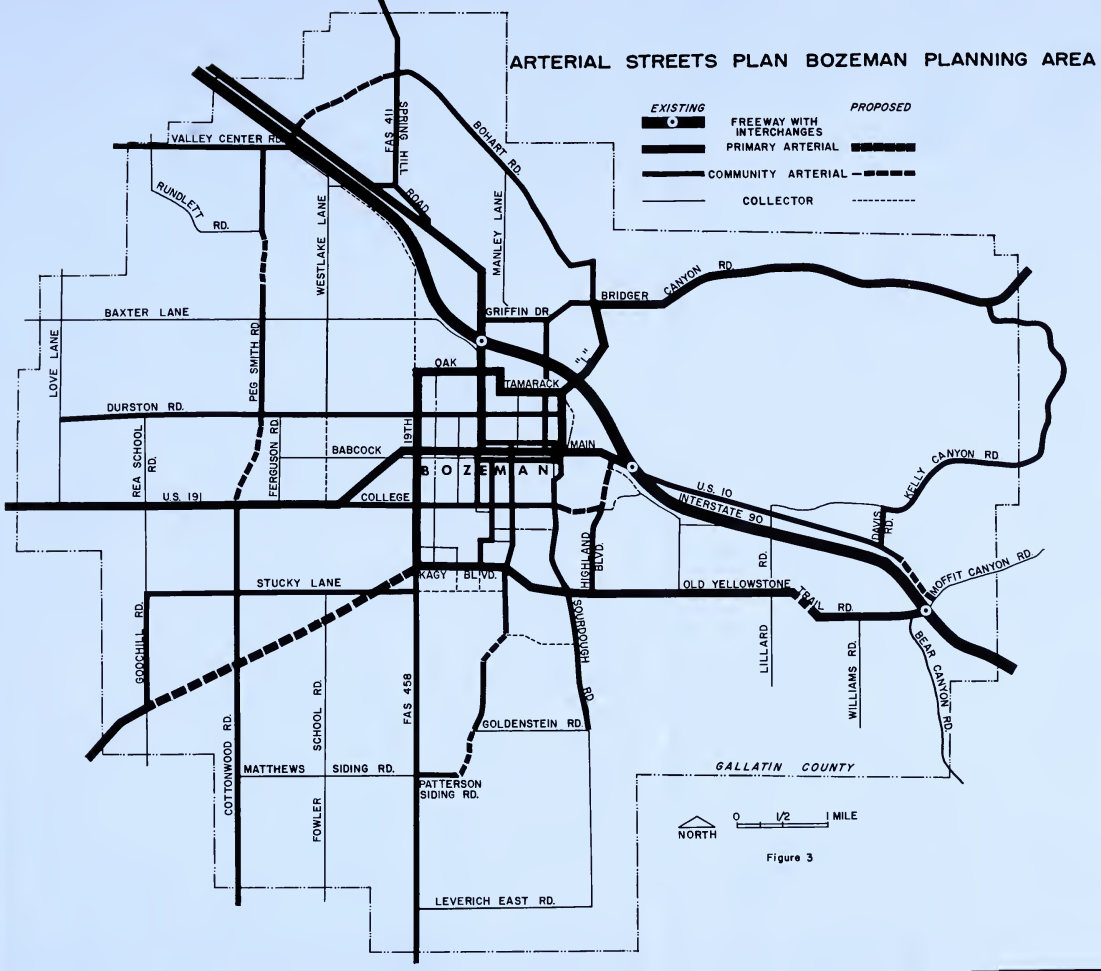
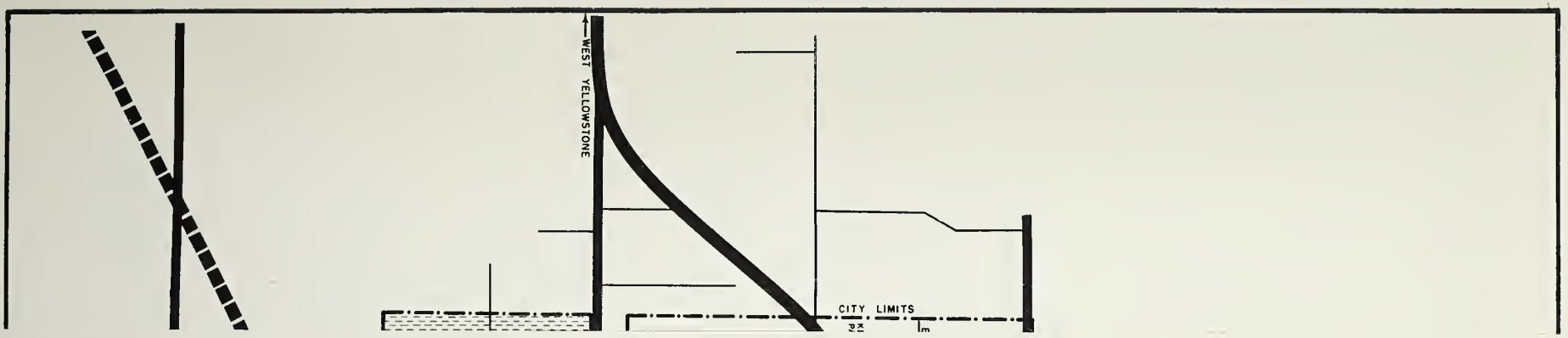

ARTERIAL STREETS PLAN BOZEMAN PLANNING AREA
EXISTING
PROPOSED
FREEWAY WITH INTERCHANGES
PRIMARY ARTERIAL
COMMUNITY ARTERIAL
COLLECTOR
VALLEY CENTER RD.
RUNDLETT RD.
FAS 411
SPRING HILL ROAD
BOHART RD.
WESTLAKE LANE
MANLEY LANE
BRIDGER CANYON RD.
BAXTER LANE
GRIFFIN DR.
LOVE LANE
PEG SMITH RD.
OAK
TAMARACK
"N"
DURSTON RD.
REA SCHOOL RD.
FERGUSON RD.
19TH
BABCOCK
MAIN
BOZEMAN
U.S. 191
COLLEGE
U.S. 10
INTERSTATE 90
KELLY CANYON RD
DAVIS RD.
MOFFIT CANYON RD
STUCKY LANE
KAGY BLVD.
HIGHLAND BLVD.
SOURDOUGH RD.
OLD YELLOWSTONE TRAIL RD.
GOOCHILL RD.
LILLARD RD.
WILLIAMS RD.
BEAR CANYON RD.
SCHOOL RD.
FAS 458
GOLDENSTEIN RD.
COTTONWOOD RD.
MATTHEWS
SIDING RD.
PATTERSON SIDING RD.
FOWLER
GALLATIN COUNTY
LEVERICH EAST RD.
NORTH
0
1/2
MILE

Figure 3


WEST YELLOWSTONE
CITY LIMITS

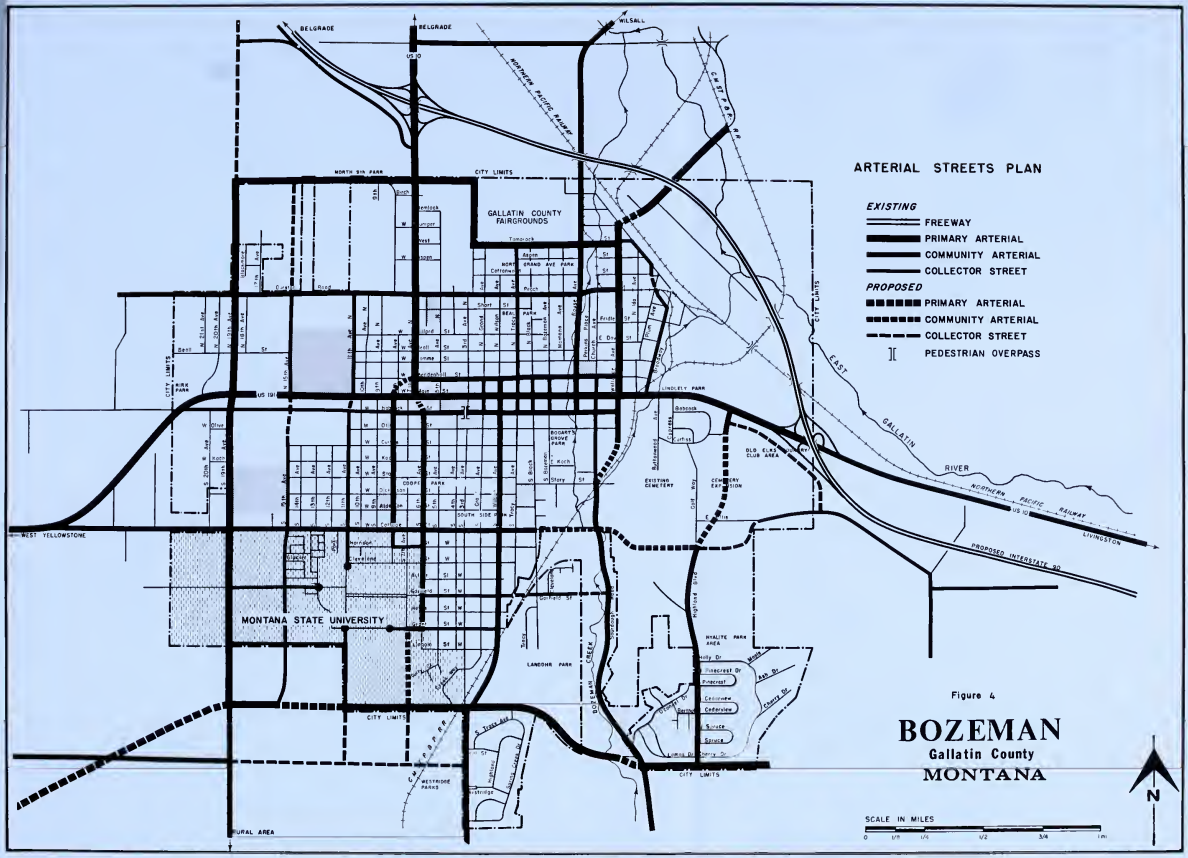


Figure 4

BOZEMAN

Gallatin County

MONTANA

first so that some relief can be provided as the plan is gradually put into effect. Proposals for implementation of the plan assume a certain amount of judgment about needs and financial capability.

The Arterial Streets Plan for the Bozeman Planning Area is illustrated on two maps. Figure 3 shows the plan for the entire planning area and Figure 4 shows the portion of the plan within the city in greater detail. Four arterial street classifications are illustrated; freeways, primary arterials, community arterials, and collector streets. Local access streets are not illustrated on the plan, since the plan is for arterial streets only. The location of future local access streets is left to the subdivision designer.

Arterial Classification

The street system should serve the varied land uses within the planning area and insure logical community development. This will involve a combination of various functional street types into an overall plan. This plan should provide for the division of streets into systems according to their purpose - for movement or for access - and integrate these systems into a coordinated network.

The arterial plan classified all streets and roads according to the transportation and service function they perform, as follows:

Freeway:

> Provides for efficient movement of large volumes of through traffic between communities and regions; does not provide access to adjacent land uses; provides one additional classification to those proposed in the Gerckins report.

Primary Arterial:

> Provides for through traffic movement to and around the city and connects major highways and freeways.

Community Arterial:

> Provides for expeditious movement within and through the planning area, for cross-town traffic in Bozeman and for circulation between areas inside the city; it also provides access to abutting property.

Collector:

Provides for traffic movement between arterials and between local streets and arterials and provides access to abutting property.

Local Street:

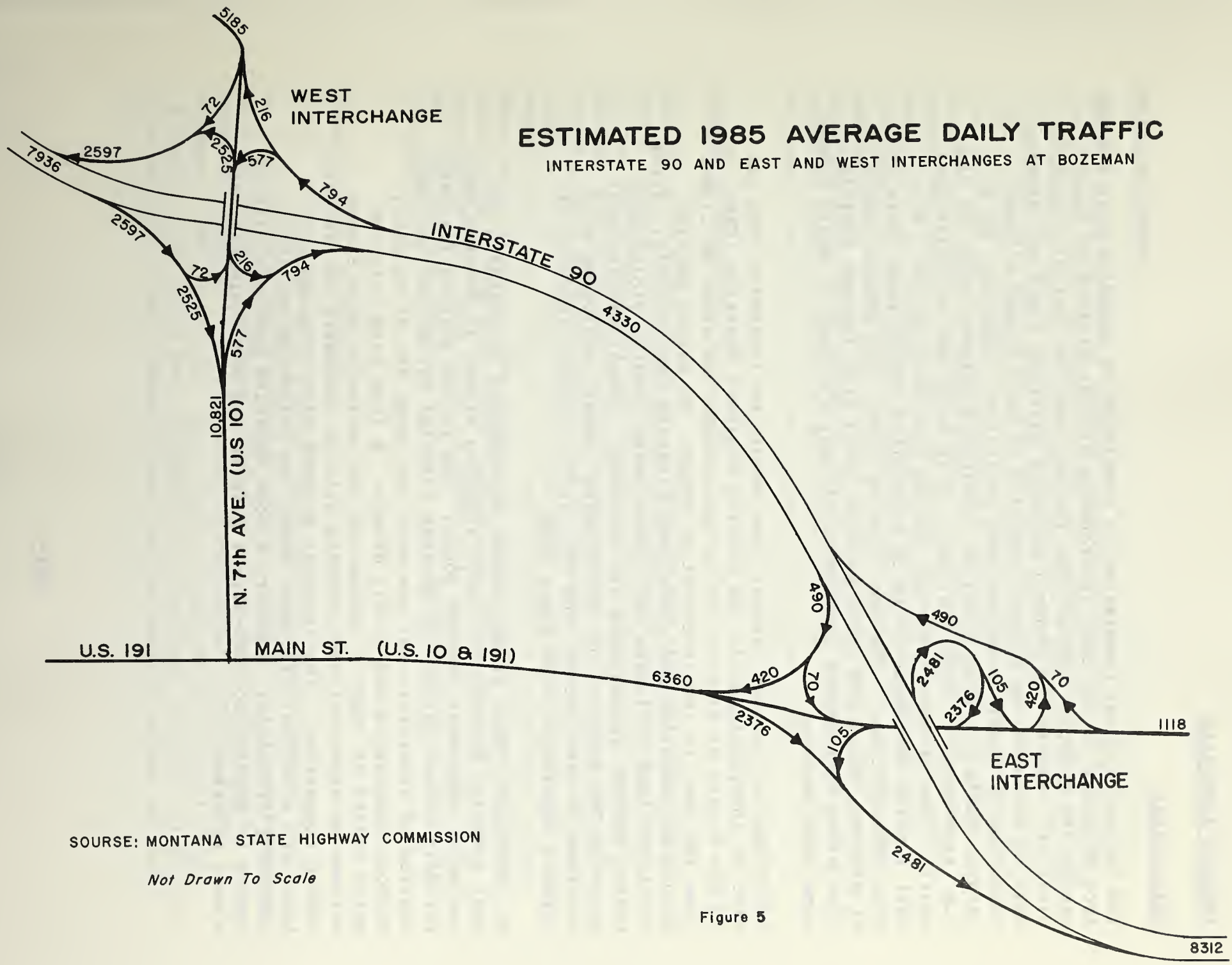
Provides for access to abutting properties and local traffic movement within a neighborhood.

The end product of this street classification is a street network integrated to provide satisfactory traffic circulation and access to commercial and industrial districts, schools, parks, residential areas, and neighboring communities. To provide the greatest efficiency and the best service, some streets are functionally oriented to movement, others to access, and some serve both of these needs.

In the following section, proposals for each of the major street classifications are discussed.

THE FREEWAY

Interstate 90 is the only freeway shown on the plan. When completed from the West interchange to the Bear Creek interchange, it will provide some relief for Seventh Avenue and Main Street by removing the U. S. 10 through traffic these streets are presently carrying. Figure 5 shows Montana State Highway Commission projections of future traffic on the freeway, the West interchange with Seventh Avenue and the East interchange with Main Street. These forecasts show that almost one-half of the freeway traffic approaching Bozeman from the west and east will continue to flow into or out of Bozeman rather than by-pass the city. In 1985, an estimated 4,330 vehicles per day will be using the freeway between the West and East interchanges. Although this traffic will be removed from city streets, it will not be a very significant amount in terms of the total traffic volumes expected on Main Street and Seventh Avenue by 1985.



SOURSE: MONTANA STATE HIGHWAY COMMISSION

Not Drawn To Scale

Figure 5

PRIMARY ARTERIALS

Main Street

The Montana Highway Commission is committed to widening Main Street from Broadway to the East interchange with Interstate 90 to increase its capacity between the freeway and the Central Business District. Within the central business district there are several ways to increase the present capacity of Main Street without resorting to costly measures such as further widening. On an interim basis, parking could be prohibited between four and six P.M. from Rouse to Eighth Avenue. This would add an additional traffic lane in each direction during this peak period. Also, left turning movements could be prohibited during peak hours at some intersections. The provision of right turn storage lanes at Willson, Tracy and Rouse Avenues would also improve traffic flow along Main Street throughout the day although it would remove some curb parking.

Bus stops for the new transit line should be located on the far side of intersections in the Central Business District (CBD), or in the middle of blocks. In no case should bus stops be closer than 100 feet to the intersection ahead. On street parking should be patrolled and violations ticketed consistently. Tires can be chalked to locate and ticket meter feeding violations. Unless parking regulations are enforced, illegal parking will occur in "No Parking" or "No Stopping" zones, employees will continue to feed meters, and the traffic control function of parking regulation will break down.

In the future, Main Street cannot be expected to continue its dual function as both the major shopping street in Bozeman and the major east-west through route. The future volumes forecast for Main Street (given the present arterial system and the completion of Interstate 90) are much too large for it to carry without congestion and costly delays. A long term solution which shifts at least a portion of the projected Main Street volumes to other selected streets will be necessary to prevent severe congestion. The Arterial Streets Plan proposes such a long term solution, discussed under the following section on Community Arterials. However, a more detailed downtown plan is needed to provide for off-street parking and other elements of a real solution.

Wallace Avenue

Rouse Avenue presently carries Bridger Canyon Road traffic into the Bozeman CBD. Although it has the capacity to carry expected 1985 volumes, there is no possibility for a future grade separation between Rouse Avenue and the Northern Pacific Railroad main line, because Interstate 90 will overpass both Rouse Avenue and the railroad at their intersection. Therefore, a long range proposal is made to remove Bridger Canyon traffic from Rouse Avenue and shift it to Wallace Avenue via the "L" Street underpassing of the freeway. This will entail construction of an overpass over the Northern Pacific main line at "L" Street and upgrading of "L" Street to the Bridger Canyon Road. This primary arterial route will provide a direct and safe connection to the northern section of the outer ring road. This is a low priority project since it will not be needed until after 1985.

Future Alternate to U. S. 191

Another long range proposal is shown on the Arterial Plan that would connect the intersection of Nineteenth and Kagy Boulevard to the existing Goochill Road which runs diagonally to Gallatin Gateway from the west jurisdictional area limits. This proposal would remove much of the U. S. 191 through traffic, particularly traffic from Yellowstone National Park, from Main Street and the central business district. It would provide a connection to the West interchange of Interstate 90 via Nineteenth Avenue and Oak Street and to the Bear Creek interchange of Interstate 90 via Kagy Boulevard. The route is shown only in a very schematic way, but has been included to show the long range need for a U. S. 191 by-pass route.

Other Primary Arterials

U. S. 191 west of Main Street, North Seventh Avenue and U. S. 10 to Belgrade are also designated primary arterials, in continuation of their present function. Widening of three blocks of North Seventh Avenue will be necessary to accommodate expected 1985 volumes. The present 100 foot right-of-way north of Beall Street is constricted to 66 feet between Beall and Main Streets, although this portion of North Seventh carries the greater volume of traffic.

Circumferential Route

A circumferential primary arterial route, or inner ring road, is proposed south of the Interstate 90 freeway, around the northern, western, and southern portions of the city. This is one of the most important proposals in the plan. Its purpose will be to bypass through traffic around the city, provide an alternative faster flowing route between various sections of Bozeman and increase accessibility to developing areas in the community. This circumferential route incorporates Tamarack Street, Third Avenue and Oak Street on the north, Nineteenth Avenue on the west, and Kagy Boulevard on the south. This will require bringing the rights-of-way of the existing portions of this route up to a minimum width of 90 feet. The missing link in Kagy Boulevard between South Eleventh and South Fifteenth Avenues will have to be constructed, and two jogs in Kagy Boulevard, at Sourdough Road and between Lillard and Williams Roads, should be eliminated.

The extension of Kagy Boulevard along the Old Yellowstone Trail Raod to the Bear Creek interchange of Interstate 90 effectively adds a third freeway interchange to the arterial system serving Bozeman, and one which provides the most direct connection from the east to Montana State University and South Bozeman. It should be emphasized that the inner ring road offers a great opportunity for development as a parkway and it is recommended that sufficient right-of-way be acquired for its eventual accomplishment. Parkway development would greatly enhance the areas adjacent to Nineteenth Avenue and Kagy Boulevard. It should be emphasized that the section of the circumferential primary arterial between U. S. 191 and North Seventh Avenue will function effectively as a truck by-pass route between the West interchange and U. S. 191.

COMMUNITY ARTERIALS

One-Way Couplets

The one-way street pattern offers a number of advantages. It separates opposing streams of traffic, increases the capacity of a street, makes turning movements easier and safer by reducing conflicts at intersections and mid-block, allows passing of slower vehicles, and increases the average vehicular speed.

These advantages more than compensate for the slightly longer distance one-way streets sometimes require motorists to travel to get to their destinations.

Figure 6 illustrates the one-way couplets proposed to relieve Main Street congestion in the CBD and around the intersection with North Seventh Avenue. Traffic now carried on South Eighth Avenue, Main Street, and from North Seventh Avenue will be dispersed to two intersecting one-way couplets. The first will utilize Mendenhall and Babcock from Church to Eighth Avenues, and the second will utilize Sixth and Eighth Avenues from Mendenhall to Harrison Streets. One-way movement will be counter-clockwise direction in both couplets. The problem of left turning movements against opposing traffic into the Central Business District from Mendenhall and Babcock is resolved by designating Willson, Tracy, Black, Bozeman, Rouse and Church Avenues one way between Mendenhall and Babcock Streets. These one-way cross streets in the CBD will also help to diminish any "pile up" on Babcock at the eastern terminus of the CBD couplet.

Traffic that is bound to or through the CBD will be encouraged to use Mendenhall and Babcock as alternates to Main through (1) signs which will direct traffic to these streets, (2) the provision of adequate off-street parking along Mendenhall and Babcock, and (3) signalization designed to speed the traffic flow on Mendenhall and Babcock. Eastbound traffic approaching Bozeman from the west on U. S. 191 could be shuttled onto Babcock at the west city limits, or onto College Avenue to bypass the central business district entirely. Community residents would soon learn that travel times would be shorter on the one-way streets, and would use them because they are more convenient. Mendenhall Street is presently about 85 percent of capacity from Third to Rouse Avenues during peak hour. To an extent Mendenhall is already used as a bypass to Main Street. Change to a one-way community arterial will increase its capacity by providing an additional moving lane and doing away with left turns against opposing traffic. However, restrictions on curb parking will also be needed by 1985 at least during peak hours. Ideally, by 1985 Mendenhall and Babcock should be clear of vehicles parked at the curb, and have adequate off-street parking lots located along these streets.

The designation of Babcock Street as a one-way community arterial will greatly increase the amount of traffic on Babcock passing

ONE WAY COUPLETS

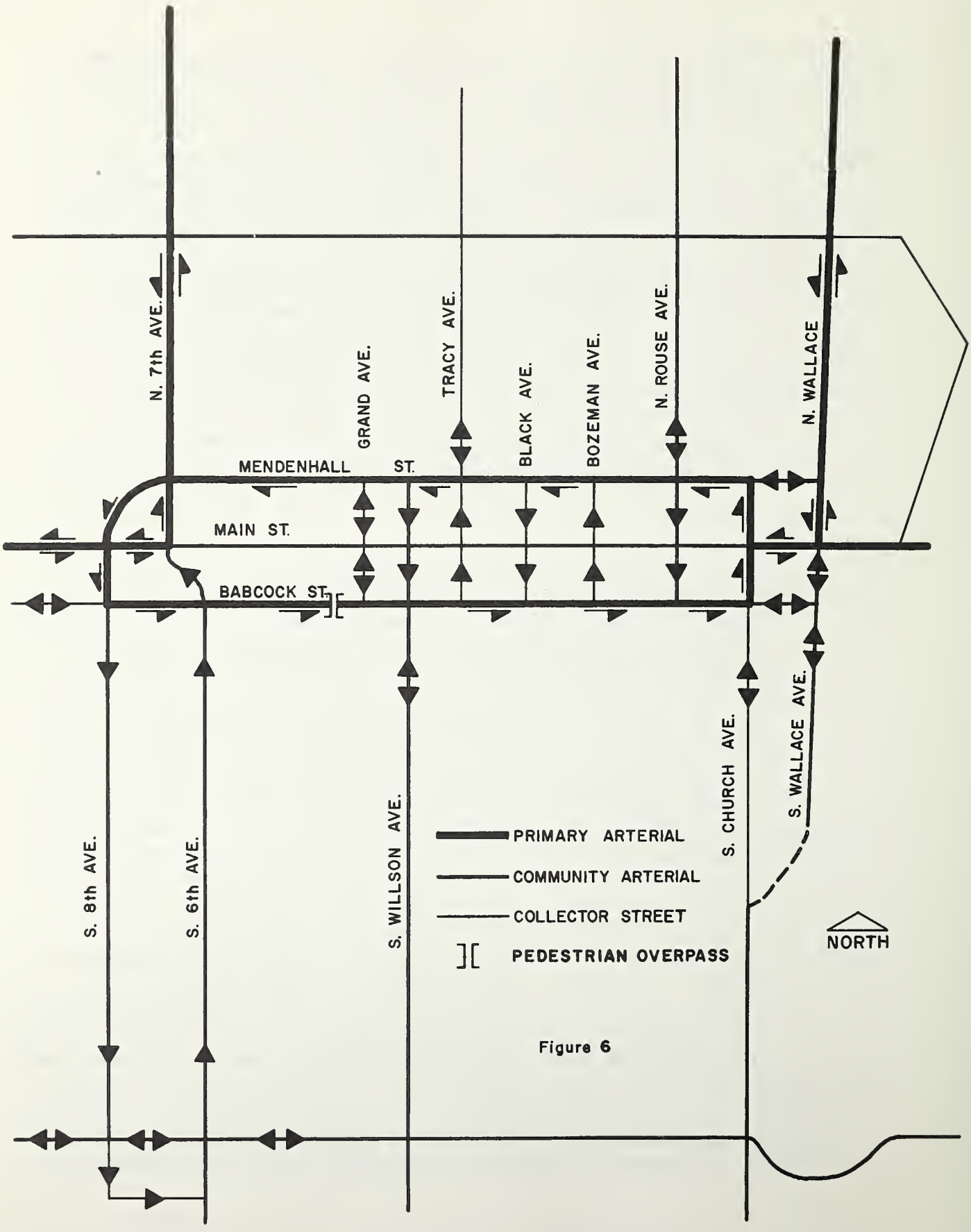


Figure 6

the Willson and Emerson elementary schools and the Rosary grade school, which are clustered around the intersection of Babcock Street and South Third Avenue. In the long run it will be desirable to relocate these schools in more desirable locations away from these heavily traveled streets. In the interim, a pedestrian bridge over Babcock Street at South Third Avenue is proposed to provide a safe crossing of Babcock Street for the children, while permitting free flow of traffic along the street. This could be financed with matching funds from the TOPICS program. The one-way pattern around the central business district with adequate off-street parking supplied along Babcock and Mendenhall Streets will help the downtown business man. With the reduction in traffic congestion, with its delays and inconvenience, more people in the trading area of Bozeman will be induced to come downtown to shop, and they will spend more. Through traffic which will be diverted away from Main Street by the one-way streets and by the freeway, represents no local expenditure except gas and motel. Therefore, it is the improvement of convenience to the local customer that means improved trade.*

The one-way couplet connecting the Montana State University with the downtown area will accommodate future traffic flows adequately. South Eighth Avenue will continue to be the major approach to the University. South Sixth Avenue will be a northerly continuation of the eastern circumferential arterial around the University. A more detailed sketch of the intersection of these two couplets with Main and Seventh is illustrated on Figure 7. This sketch shows how traffic flows could be channelized. Turns will be allowed only where shown. Certain turning movements onto Main from Eighth and Seventh Avenues will be prohibited to encourage greater use of Babcock and Mendenhall Streets.

Highland Boulevard

Highland Boulevard is designated a community arterial from Kagy Boulevard north to Harrison Street and a new northerly extension of Highland Boulevard is proposed following the swale from Harrison Street to meet U. S. 10 at a point just west of the East interchange. This route will provide a connection, which bypasses the central business district, from South Bozeman to the freeway.

---

* "Do By-Passes Hurt Business?" Chamber of Commerce of the U. S. Publications.

ONE-WAY COUPLETS DETAIL

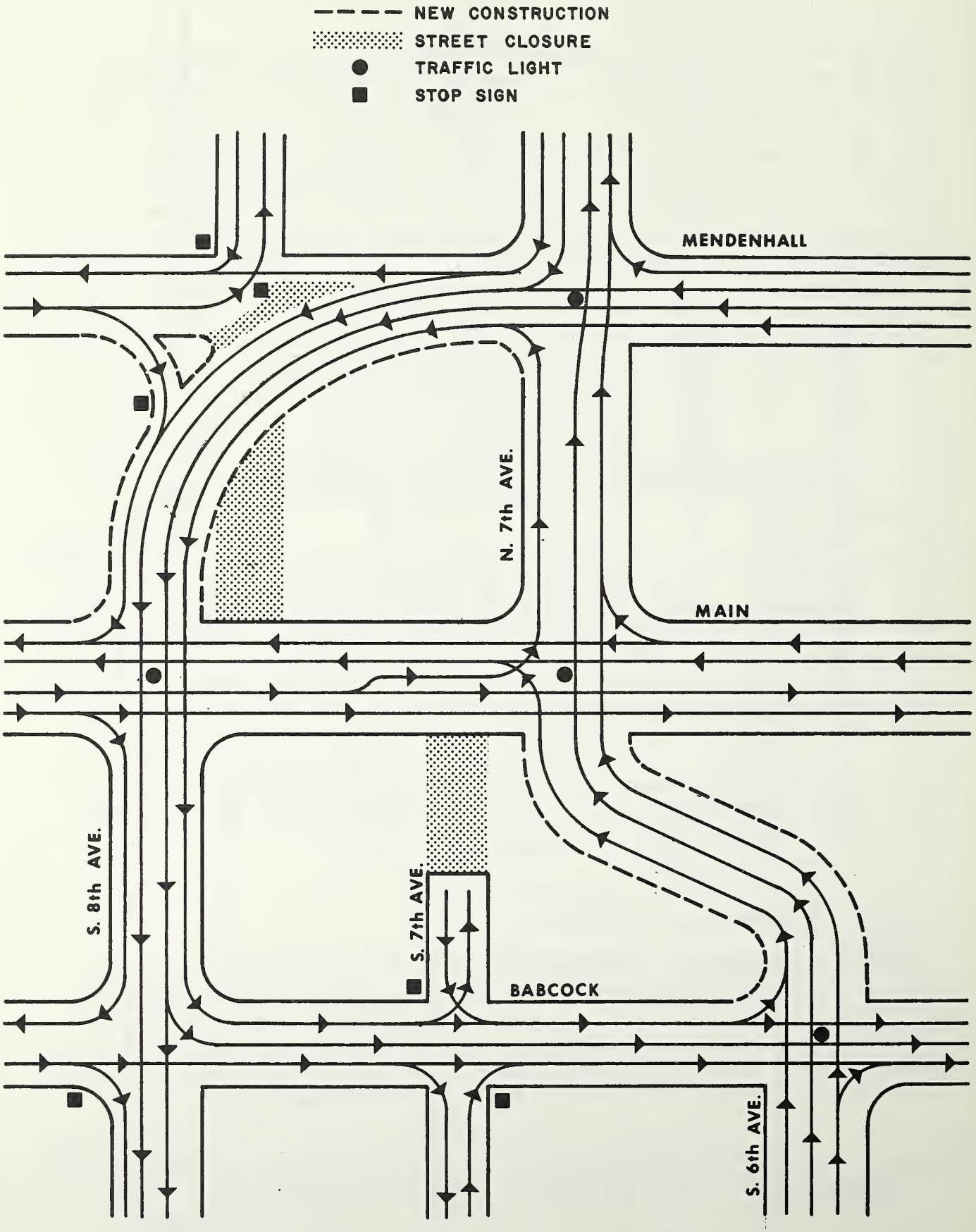


Figure 7

College Street

College Street is designated a community arterial from its intersection with West Main Street (U. S. 191) west of the city limits, to Highland Boulevard at the east city limits. It will follow the existing right-of-way west of Bozeman Avenue, but will require construction of a new road across Sourdough Road, swinging south to Harrison Street to Highland Boulevard. This important proposal in the plan will provide the much needed cross-town route passing Montana State University and will also provide an alternative route, located away from the CBD, for U. S. 191 through traffic. It will, however, connect to several arterials leading to the CBD.

Outer Ring Road

An outer ring road is proposed from the intersection of "L" Street and Bridger Canyon Road, circling to the north of the golf course on Bohart Road, and connecting to McGinley Road via the freeway underpass west of Bozeman and continuing south on McGinley Road, Peg Smith Road, and Cottonwood Road. Construction will be required to fill in several gaps in the outer ring road. These gaps are (1) from Cottonwood Road at U. S. 191 to Peg Smith Road at Durston Road, (2) between the north end of Peg Smith Road and McGinley Road, and (3) between the freeway underpass at Valley Center Road and Bohart Road at FAS 411. This route, which is a comparatively long range proposal, will make areas of future residential development more accessible, and provide a unifying connection between the northern and western portions of the jurisdictional area split by the Interstate 90 freeway.

Rouse Avenue

Rouse Avenue has the capacity to carry expected 1985 traffic from Mendenhall north without difficulty. However, from Main to Mendenhall Streets, traffic control measures may be necessary to increase the capacity of Rouse Avenue before the proposed one-way couplet system is instituted. The restriction of parking along the west side of Rouse Avenue at the southbound approaches to Mendenhall and Main Streets will allow for right turning movements without blocking through traffic lanes. Although Rouse Avenue is presently a primary arterial, it will become a community arterial when "L" Street takes over its function of carrying Bridger Canyon Road traffic sometime after 1985.

Willson Avenue

Willson Avenue is proposed as a community arterial from Mendenhall to Hyalite Road. It is recommended that two jogs be removed, the first between Willson and Third Avenue South Road, and the second between Third Avenue South Road and Patterson Siding Road. The removal of the latter jog will eliminate two grade crossings of the Milwaukee railroad line as well as provide a safer and straighter road.

Wallace Avenue - South Church Avenue - Sourdough Road Arterial

In order to provide a north-south cross-town arterial on the east side of Bozeman, a short new road paralleling the north side of the Milwaukee railroad line is proposed to connect South Wallace Avenue with South Church Avenue (Sourdough Road). This community arterial, coupled with the North Wallace Avenue primary arterial, will supply a convenient north-south arterial route at the east end of the CBD.

Other Community Arterials

A number of other existing roads are designated community arterials to complete the system. These include - Valley Center Road west of the freeway underpass; Bear Canyon Road; Kelly Canyon Road; Old U. S. 10 between the East and Bear Creek interchanges with Interstate 90; Hyalite Road south of Kagy Boulevard; Stucky Lane; Goochill Road south of Stucky Lane; Durston Road from Love Lane to Wallace Avenue; Springhill Road; and Griffin Drive between U. S. 10 and Rouse Avenue.

COLLECTOR STREETS

Far fewer collector streets are shown in the proposed plan than in the Gerckins review of the DeBoer Plan. The system of collector streets proposed outside the city in the Gerckins plan could not be supported by the expected distribution of future population or traffic volumes until considerably after the year 1985. Furthermore, the possibilities for good subdivision design would be restricted by locating, at this time, all collector streets in areas

of future growth. The location of future local access and collector streets can be controlled by the careful administration of a good subdivision ordinance. This will require increasing awareness on the part of the planning board, in future review of subdivision plats, of the implication of a plat on the street system, and an insistence by the Board on good circulation planning.

Many of the traffic problems caused by the present layout of platted streets in Bozeman, particularly the jogs in north-south streets, could have been avoided. It is recommended that the City-County Planning Board pay special attention to proposed circulation patterns in all new subdivisions and to the relationship between traffic generated by the subdivision and its effect on the surrounding arterial streets, not only at the time of platting, but with consideration to future development in the surrounding area. As a general rule, each quarter square mile of new development should have a collector carrying traffic to the major arterial system with a minimum 60 foot right-of-way. Proposed collector streets within Bozeman include Fifteenth Avenue from Kagy Boulevard to Oak Street, Eleventh Avenue from College Street to Durston Road. Tracy Avenue is designated a collector between Babcock and Tamarack Streets to serve the residential areas north of the CBD. Several collector streets will serve the Montana State University area; Garfield and Lincoln Streets west of the new dormitories; Grant Street from South Sixth to Willson Avenues; Garfield from South Sixth Avenue to Sourdough Road; and three streets around the relocated stadium south of Kagy Boulevard.

A collector for truck traffic in the industrial area in northeastern Bozeman is proposed from Tamarack Street at Wallace Avenue, via Tamarack, Front, Avocado and Broadway to East Main Street. This collector will connect the northern portion of the inner ring road with U. S. 10 thus providing truck access to the industrial area from both the East and West Interstate 90 interchanges while avoiding the most heavily traveled city streets.

A collector is proposed from Harrison and Highland Boulevard to Ellis Avenue and along Ellis Avenue to Lillard Road. This collector will serve the proposed Elks Country Club Park. The Montana Highway Commission is now studying the location of the freeway frontage road which will connect Ellis Avenue to U. S. 10. We recommend that the frontage road tie into the proposed Highland Boulevard extension south of East Main Street so as to eliminate one additional intersection with East Main.

Three collectors among those designated in the planning area outside Bozeman will require new construction. These are: (1) a new road between South Willson Avenue and Sourdough Road, at the southern edge of the golf course south of Kagy Boulevard, (2) a southerly extension of Westlake Lane from Baxter Lane to U. S. 191, and (3) a northerly extension of Nineteenth Avenue from Oak to the freeway and then a frontage road to the northwest to the existing frontage road.

FUTURE MONTANA STATE UNIVERSITY TRAFFIC

Montana State University has prepared plans for future student housing developments and pedestrian circulation on the campus that will have a considerable effect on traffic flow to and around the University in the years to come. At the present time, Cleveland, Garfield and Grant Streets are open to vehicular traffic across the campus from Sixth to Eleventh Avenues and Eleventh Avenue traverses the campus from north to south. Present University plans call for the closure of these streets as through streets within the campus boundary. The role of these streets on campus in the future will be only for access to parking lots located around the periphery of the campus. Instead of the present pattern of traffic flowing into and through the campus, future traffic will be directed around the campus.

University traffic will increase greatly toward the western end of the campus with the development of 900 units for married student housing between Fifteenth and Nineteenth Avenues south of College Street replacing those presently located between Eleventh and Fifteenth Avenues. Additional high rise dormitories are planned for the area west of Eleventh Avenue in the vicinity of the present high rise dormitories. A large parking lot is planned for the area west of Fifteenth Avenue, west of the high rise dormitories and south of the proposed married students housing to serve both these University residential uses.

To distribute traffic around the perimeter of the University campus, a set of circumferential arterials is proposed. As illustrated on Figure 4, this campus loop will incorporate College Street on the north, Kagy Boulevard on the south, Nineteenth Avenue on the west, Sixth Avenue on the east from College Street to Grant Street, Grant Street from Sixth to Seventh Avenues, and Seventh Avenue from Grant Street to Kagy Boulevard. To link this circumferential arterial loop to freeway interchanges and other parts of Bozeman, Nineteenth Avenue will be extended to the north as a primary arterial to connect with the West freeway interchange via Oak Street, and Kagy Boulevard will be extended as a primary arterial to the east to connect to the Bear Creek interchange. College Street will be extended to the east across Sourdough Road on a new road to connect to U. S. 10 and the East freeway interchange via the relocated northern portion of Highland Boulevard.

Two north-south streets will continue to traverse the campus, Fifteenth and Nineteenth Avenues. Several collector streets are proposed in the vicinity of the University. Fifteenth Avenue is also proposed as a collector street from Kagy Boulevard to Oak Street and Eleventh Avenue is proposed as a collector from College Street to Durston Road. Extensions of Seventh and Eleventh Avenues south of Kagy Boulevard are recommended to intersect with a proposed easterly extension of Stucky Lane from South Nineteenth Avenue to South Willson Avenue. These last three new streets would collect traffic from the University Research Park between the Milwaukee railroad and South Seventh Avenue, the relocated Gatton Field Stadium between Seventh and Eleventh Avenues south of Kagy Boulevard, and future residential development south of the University. Extensions of Seventh and Eleventh should be financed entirely by the University, while the Stucky Lane extension should be a joint MSU-County project.

The consultant concurs with the University's plans to close South Eleventh Avenue, Cleveland, Garfield and Grant Streets within the campus to through traffic. However, this should be done only after provision of adequate off street parking is made. These streets would still have to be available for delivery and emergency use. These proposed street closures not only will create a more pleasant and efficient environment for student pedestrian traffic, but will be necessary from a safety standpoint as well. Present enrollment and the number of student vehicles will more than double by 1985. Traffic movement on the campus would become impossibly congested if the existing streets were left open to through traffic because of the increasing conflicts between vehicles and pedestrians.

The net effect of the campus street closures, proposed new arterial and collector streets, and provision of new campus parking lots will be to change the current traffic patterns, which concentrate traffic around the northeast corner of the campus, particularly on Eighth Avenue, and disperse traffic more evenly around the campus. These changes should aid rather than hinder better traffic control.

Problem Intersection

At the present time a dangerous intersection is located at the south city limits, where Kagy Boulevard, South Third Avenue and Willson Avenue meet. The proposed street closures on the Montana State University campus and the resultant changing traffic patterns will shift much more traffic to this intersection in the future.

It is proposed that South Third Avenue be considered only as a local access street with its southern termination at Kagy Boulevard. In order to insure the local access character of the street, as much South Third Avenue through traffic as possible should be shifted to South Seventh or South Willson Avenues. This can be accomplished as illustrated in Figure 8 by allowing no access to South Third from Kagy Boulevard, and limiting the turning movements allowed from South Third Avenue to Kagy Boulevard to a right turn only. This will prevent traffic which wishes to go east on Kagy Boulevard or south on Willson Avenue from using South Third Avenue.

Two additional alternatives were also presented to the city. Both of these involved the complete closure of the south end of South Third Avenue north of Kagy Boulevard. In one, South Third was proposed to end in a cul-de-sac north of the railroad track. In the other, a new link was proposed from South Third Avenue to intersect with Willson at least 150 feet north of Kagy Boulevard. Both of these alternatives are preferable to Figure 8 from a traffic engineering standpoint, but the city believes it would not be feasible to close South Third Avenue completely.

PROPOSED INTERSECTION

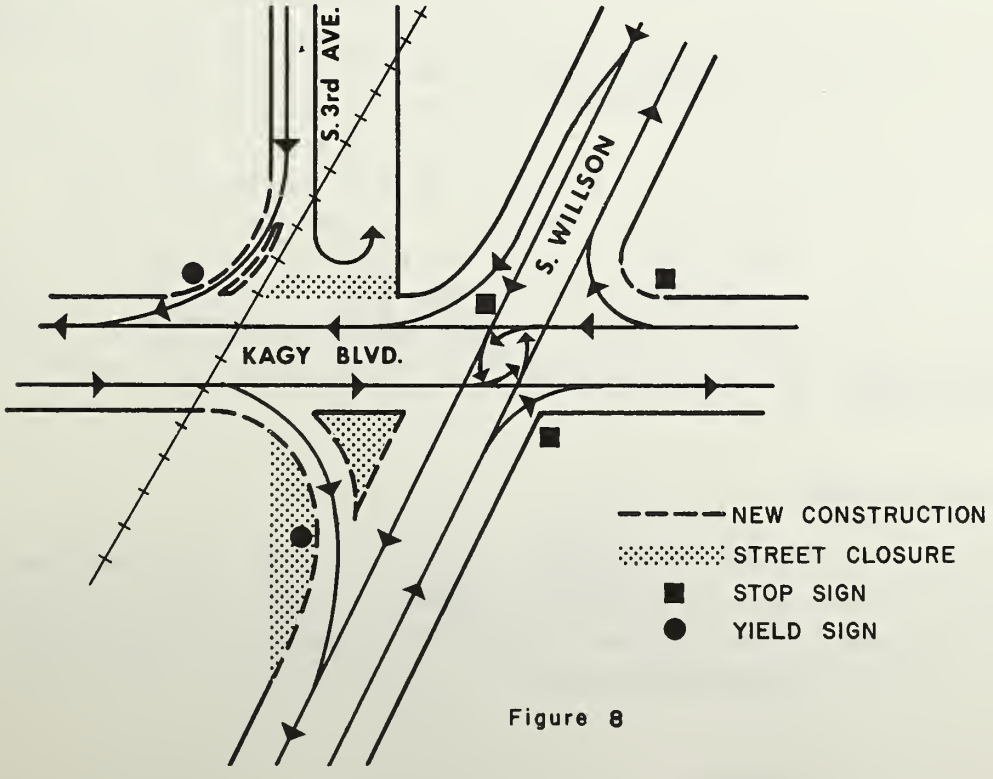


Figure 8

Design Standards

As a guide to subsequent implementation programs, design standards and right-of-way illustrations are provided below and on Figure 9.

Table 2

RECOMMENDED THOROUGHFARE DESIGN STANDARDS

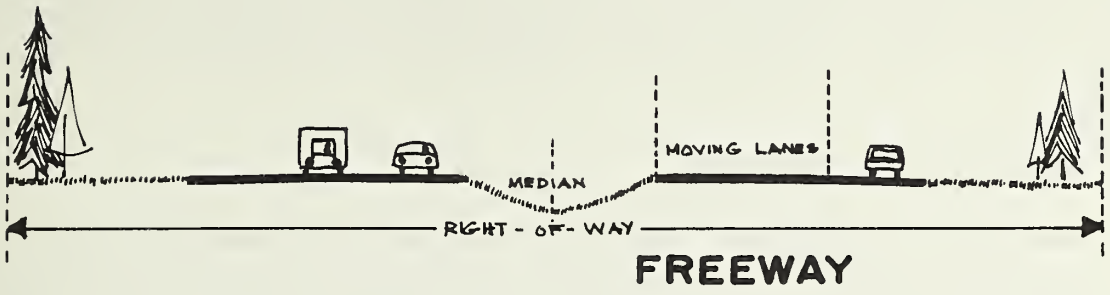
Thoroughfare Type	Right-of-way width	No. of Moving Traffic Lanes	Median Strip Width	Traffic Volume ADT
Freeway	150'-400'	4-8	4'-80'	20,000-150,000
Primary Arterial	90'-200'	4-6	20'-60'	Varies with function
Community Arterial	80'-120'	4	0'-20'	1,000-25,000
Collector	60'- 80'	2	0	600- 1,500

The foregoing description of the Arterial Streets Plan proposal is based on studies of traffic volumes and flow patterns, street capacity and future traffic demand. These studies were depicted in text and graphics in the preliminary Arterial Streets Plan report presented to the Planning Board in April 1967. The traffic studies provide the analysis of present and potential problems for which the plan is intended to provide solutions. These studies provide both the justification for the Plan and the reasons for specific proposals. Thus, anyone interested in the Plan's Why and Wherefore should refer to the more detailed technical report mentioned above.

Implementation

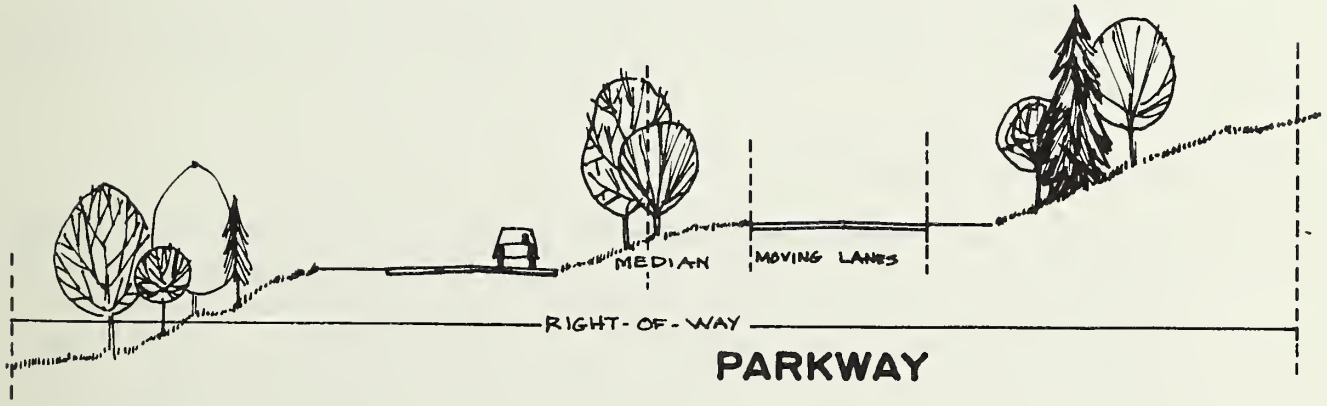
Obviously the arterial streets plan must be implemented to be worthy of even being called a "plan". And just as obviously, it is not going to be implemented all at once or overnight. As with other elements of the plan, this plan will be implemented over

RIGHT-OF-WAY ILLUSTRATIONS



FREEWAY

PRIMARY ARTERIAL



PARKWAY

COMMUNITY ARTERIAL

COLLECTOR

FIGURE 9

the coming years based on city and county resources and upon whatever assistance the state and Federal governments can make available over time. A few of the means for implementation are discussed briefly.

1. Subdivision Controls

Whenever a proposed subdivision plat is proposed in an area in which the plan calls for an arterial, the City-County Planning Board should require the dedication of the right-of-way and the improvement of the areterial street to the recommended standards. In this way some of the plan can be implemented, though only piecemeal.

2. Capital Improvements

The proposed capital improvements program includes step by step priorities for acquisition of right-of-way and street improvement of the high priority needs for street connections and traffic engineering. Gas tax funds can be used for these purposes.

3. Federal Aid Programs

Federal Aid highway programs under the new Federal Department of Transportation include the Federal interstate program, the Federal Aid primary and secondary roads programs and the TOPICS program. Increasing attention is being given to local urban travel needs by Federal and state programs. In every case, these programs are administered by and priorities determined by the State Highway Commission.

Federal Aid funds vary from 90 percent for an interstate route to 50 percent for urban service routes. The new TOPICS program (Traffic Operations Program to Increase Capacity and Safety) provides 50 percent of Federal funds for traffic engineering, signing, pedestrian overpasses, bus stop improvements, signalization of intersections, traffic channelization and lane markings for important urban streets, based on traffic engineering study and plan. This program is also administered through the state highway agency.

PARKS and OPEN SPACE PLAN
BOZEMAN PLANNING AREA

PARK PLAN

INTRODUCTION

Scope

This report outlines suggestions for an increased and orderly development of park facilities in the City of Bozeman and its metropolitan area, represented by the jurisdictional area of the City-County Planning Commission. Included in the report are an inventory and analysis of existing parks and recommendations for continued planning and development.

The Past

Community concern for Bozeman's park facilities is not new. Individual citizens developed and were concerned about parks over three decades ago, as shown by the following remarks by a Mrs. E. Lina Houston in 1933:

> "On the school grounds of the cities and in most of the rural districts, plots have been set aside for playgrounds with equipment of various kinds. Beall Park is a municipal park and playground under supervision, with the grounds equipped with special apparatus, ballgrounds, tennis courts, picnic grounds, bandstand for summer use, and with a large plot of ground made into a skating rink in the winter time. A beautiful community building or recreation center was built and presented to the city by Mrs. E. Martin, the ground having been secured from Mrs. W. T. Beall through funds raised by private subscription. Trees and shrubs have been added to those raised by pioneers. Bogert Grove Park was purchased by the city, and for a time was used as a tourist park by the city, but now is used for picnics and for Boy Scout gatherings. Cooper Park was presented to the city through the efforts of Walter Cooper, and is a beautiful spot used for picnics in the summer."

These remarks indicate the sense of responsibility for providing community parks by past generations of Bozemanites. Based on these past traditions it seems ironic then that not one dime has been spent on capital improvement of Bozeman's parks since 1937.

The Present

Essentially, park facilities in Bozeman today remain just as Mrs. Houston described them. Bozeman's situation is not unique but reflects the nationwide need for more park facilities within urban areas to meet the ever increasing demands of growing populations with increased leisure time. As this need becomes greater, due to population growth and the social pressures for environmental amenities, it becomes progressively more difficult to fulfill. Communities everywhere are faced with the problem of finding means to satisfy and augment this demand within a diminishing framework of available space and untarnished natural features.

Superficially, today's complex social and economic structure has shifted the responsibility for community planning from the private to the public sector. In reality, however, municipal, state, and Federal agencies can only function effectively and beneficially on the basis of a dynamic interrelationship with serious and dedicated individuals within the community. The same sort of citizen action as existed in Bozeman's past, springing from recognition of the importance of urban betterment, will be necessary for the implementation of proposed park programs.

This report is a first and necessary step by the residents of Bozeman, through their city-county governments, toward correcting an existing deficiency in the city's park facilities.

The Challenge

"At labor, we earn a living - at leisure, we learn a life."

L. P. Jacks
British Philosopher

Unless provisions are made now for the establishment, development, and maintenance of parks in Bozeman, other developments--residential,

commercial, and industrial--will usurp the most desirable remaining lands within the jurisdictional area. Although such private, non-recreational uses are vital, they can usually be accommodated in areas less suitable for the specialized environmental requirements of quality recreation.

Public park lands offering pleasant environments, a variety of outdoor activities, and easy access from business areas, as well as residential areas, are necessary for the enhancement of urban living. Perpetuation of parks will assure long-range community enjoyment for Bozeman's residents, and will contribute immeasurably to the enduring economic and cultural welfare of the city.

Attainment of an optimum plan for city parks demands the following fundamental land-use attitudes and practices:

1. Use of land as a building site is not always the best use.

2. The natural environment must be respected, and must be preserved in certain areas.

3. Lowlands and waterways must be set aside to preserve natural drainage.

4. Open space must be provided in intensely developed residential and commercial areas.

5. Prime agricultural lands must be protected against unwise subdivision.

6. Future needs must be envisioned, and hasty, random developments avoided. This means that a primary consideration in any proposed subdivision or major land-use project must be its conformity to Bozeman's long-range plan for parks, open space, and recreation areas.

The challenge for Bozeman today, as for any community, really boils down to the question of whether or not we have the courage to fight for our heritage and protect the environment we live in. This challenge is implicit in the following words of Omar Bradley:

"Year after year our scenic treasures are being plundered by what we call an advancing civilization. If we are not careful, we shall leave our children a legacy of billion-dollar roads leading nowhere except to other congested places like those left behind. We are building ourselves an asphalt treadmill and allowing the green areas of our nation to disappear."

BASIS FOR A PLAN

Objectives

Any plans for park facilities for Bozeman must be coordinated with other elements of the comprehensive plan. On this basis, the park plan seeks to:

1. Preserve natural features and amenities and conserve natural resources for the welfare of the community, the area, and society as a whole.

2. Set aside adequate parkland for each segment of the community.

3. Suggest acquisition and development of land for a unified system of parks.

4. Indicate areas of coordination with other land uses.

Assumptions

To make recommendations for a park system for Bozeman, it is necessary to assume that:

1. Bozeman's population will continue to grow as forecasted.

2. Montana State University will continue to grow and exert an ever-increasing influence on the city and the surrounding area.

3. The tourist industry will continue to grow and exert its influence in the Bozeman area.

4. Transportation routes will be further improved and extended in accordance with projections and recommendations of the comprehensive plan.

5. Urban facilities and services will be further improved and expanded with continued growth of the city.

6. The city and county are eligible for and desire to receive state and Federal assistance in acquiring and developing lands for parks.

7. The city desires to increase its ownership and development of parks.

Guidelines

Parks vary in size, use, and location. Each individual park meets a certain specific demand or need within the community. It is necessary in the planning process to establish certain basic classifications for areas that serve different purposes. Because no two parks, even within the same classification, are identical to size, physical character, and facilities, we have chosen to call these classifications guidelines rather than criteria; the latter would imply an inflexible set of standards. Guidelines for Bozeman appear on the following page.

EXISTING PARKS AND FUTURE NEEDS

Bozeman currently contains six developed parks, totaling 33.8 acres. There are also 100.6 acres of dedicated but undeveloped parkland within the jurisdictional area. Portions of the undeveloped acreage are topographically unsuitable for developed recreation use. Such portions should be classified as conservation areas, greenbelts, etc.

Criteria, as set forth by the National Recreation and Parks Association, prescribe a minimum of 10 acres of parkland per 1,000 people to adequately serve the recreation needs of a community. With an estimated city population of 18,683 in 1966, and only 33.8 acres of developed parkland, Bozeman

PARK GUIDELINES

Areas that provide for a variety of recreation activities in either a natural or man-made environment.

TYPE OF PARK	SITE SIZE	AGE GROUP SERVED	SERVICE AREA	MIN. AREA PER 1000 POP.
PLAYLOT Intended primarily for areas of high populotion density such as apartment complexes. Ploylots are designed for the preschool age group. Usually fenced and sometimes supervised, the playlot should be provided by the developer.	1/2 – 1 ACRE	PRE-SCHOOL 1–5 YRS.	1/8 – 1/4 MILE	1 ACRE
NEIGHBORHOOD PARK As the name implies, this classification is meant to serve o specific neighborhood area. These parks are developed primarily for the school-age children and should be, where ever possible, developed in conjunction with elementory schools.	4 ACRE MIN. 10 ACRES DESIRABLE	1 YR.& UP	1/4 – 1/2 MILE	2 ACRES
COMMUNITY PARK A large, sometimes natural area, with adult and community recreation facilities such as tennis courts, ballfields, picnic areas, etc.	10 – 20 ACRES	1 YR.& UP	1/2 – 1 MILE	2 ACRES
REGIONAL PARK A prominent natural area contoining large open spaces as well as some of the recreation facilities found in the other classificotions.	100 – 200 ACRES	1 YR.& UP	CITY & AREA	5 ACRES

OTHER TYPES OF PARKLANDS

PARKWAYS

Pleasant thoroughfares through natural wooded or landscaped areas, restricted to noncommercial low-speed traffic. Such drives are located to take advantage of the natural and scenic attractions of the area. Parkways often connect various parks or other outstanding scenic or historic points of interest.

DRAINAGE COURSES

Areas along streams or major drainages protected from development (by zoning) that might impair drainage. Often these areas serve as parkway locations.

GREENBELTS

Buffer zones of natural vegetation separating different land-use areas, such as commercial from residential.

CONSERVATION AREAS

Areas of undeveloped steep topography or ecological importance, or marshlands. Usually such lands are difficult and costly to develop, and should be acquired or restricted from development by means of zoning or public ownership.

MISCELLANEOUS

Small parcels of land, such as at street intersections, or odd lots where old buildings have been removed.

obviously comes nowhere near meeting these national standards. Even if all 134.4 acres of dedicated parkland were developed and accessible, parks sufficient for a population of only 13,000 to 14,000 people would be provided. If this criterion of 10 acres per 1,000 people is accepted as a starting point in determing Bozeman's parkland needs, an additional 52.4 acres should be acquired immediately and added to the total acreage.

Many considerations, however, other than amount of acreage are, of course, involved in determining whether a park system is adequate for a community. Location, population characteristics, etc., influence the park size and pattern in a town. The following three charts show Bozeman's present parkland status and needs, including some specific notations regarding their capabilities of providing adequately for the use for which they are intended.

As noted, the existing parks do not meet the criteria for parkland needs as set forth by the National Recreation and Parks Association. In addition, a number of the town's developed parks are over-used. Both of these facts have been taken into consideration in the recommendations for expansion and development contained in this report.

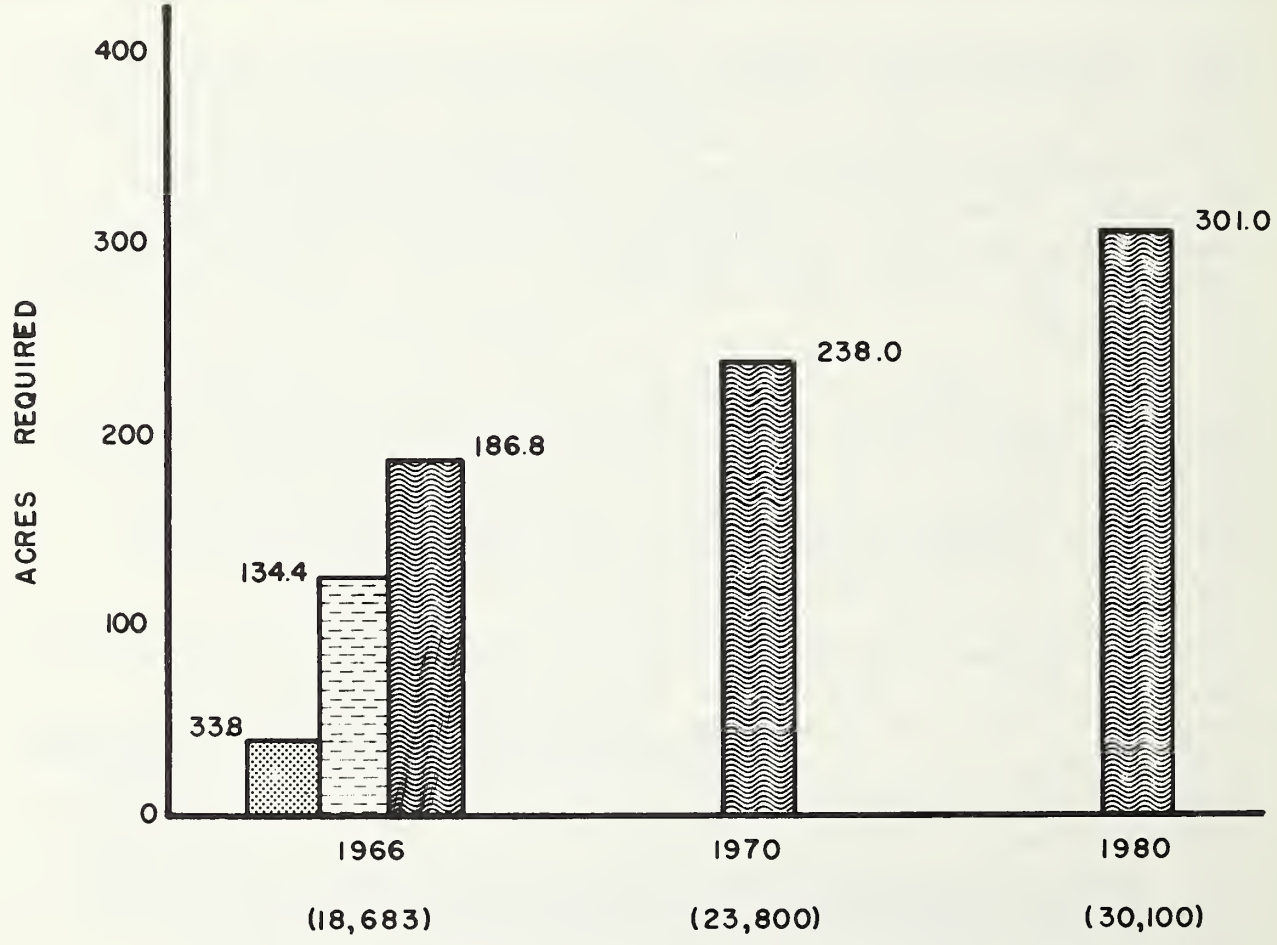
Most of Bozeman's developed parks are well located within the central section of the town. The peripheral areas lack developed parks, although the dedicated parklands are generally well located. Use by residents from outside the city limits, combined with in-town use, puts a heavy burden on the existing developed parks. Meeting Bozeman's recreational needs therefore depends primarily on developing dedicated but undeveloped parkland and acquiring additional parkland in the peripheral areas of the city.

One factor which might appear to lessen the need for the regional park as recommended on the park plan for the jurisdictional area, is the many recreational opportunities in the nearby national forests.

The Gallatin Forest, which is located both north and south of Bozeman, affords some basic regional park recreation activities, such as hiking trails, fishing streams, wild game of various

BOZEMAN'S PARKLAND NEEDS*

* BASED UPON NATL. REC. AND PARK ASSOC. STANDARDS OF 10 ACRES PER. 1000 POP.



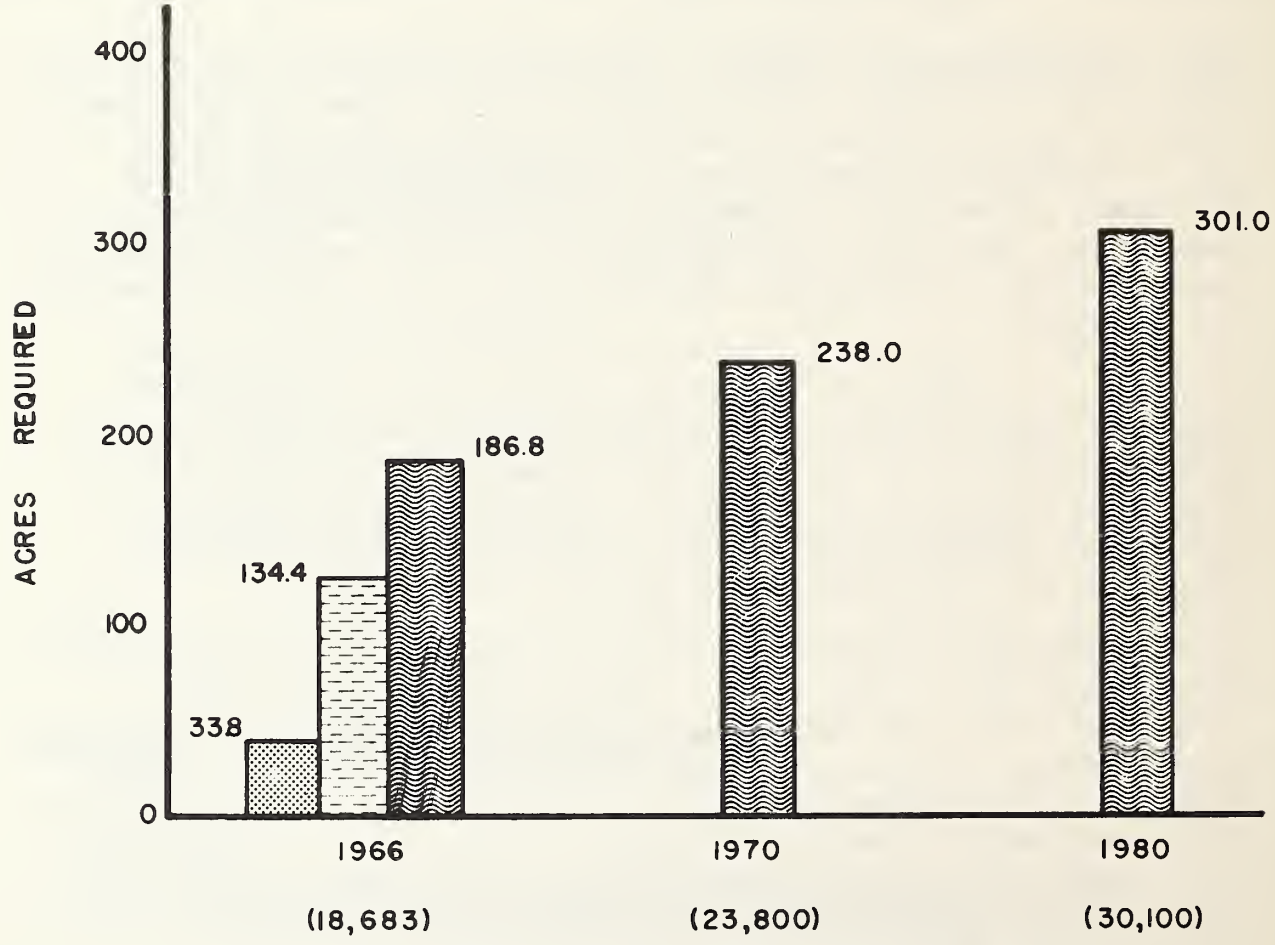
EXISTING DEVELOPED PARKLAND (1.8 A. PER 1000 POP.)

TOTAL EXISTING DEDICATED PARKLAND (7.2 A. PER. 1000 POP.)

DEDICATED PARKLANDS NEEDED (10 A. PER 1000 POP.)

BOZEMAN'S PARKLAND NEEDS*

* BASED UPON NATL. REC. AND PARK ASSOC. STANDARDS OF 10 ACRES PER. 1000 POP.



EXISTING DEVELOPED PARKLAND (1.8 A. PER 1000 POP.)

TOTAL EXISTING DEDICATED PARKLAND (7.2 A. PER. 1000 POP.)

DEDICATED PARKLANDS NEEDED (10 A. PER 1000 POP.)

an inventory of:
BOZEMAN'S EXISTING DEVELOPED PARKS

EXISTING FACILITIES

PARK NAME	SIZE	CLASSIFICATION *	SHELTER BLDG.	SERVICE BLDG.	RESTROOMS	BANDSTAND	BASEBALL	SOFTBALL	BASKETBALL	TENNIS COURTS	SKATING RINK	HORSE SHOES	BENCHES	PONDS	PICNIC TABLES	SWIMMING POOL	PLAYGROUND EQUIPMENT * *
BEALL PARK Area lacks turf and trees and shaws signs af intense use. Surraunding waven-wire fence and tennis court need repair ar replacement.	2.1 ACRES	NP	1		2			1	1	1	1				1		26
BOGERT'S GROVE PARK Park is aver-developed and heavily used. Camping shauld be eliminated, tennis caurts resurfaced, and ather facilities renavated. Turf shauld be established and area landscaped.	6.8 ACRES	NP	1		2	1		1		3		3	11		13		18
COOPER PARK Well treed, attractive, and devaid af any active recreatianal facilities, Caaper Park is ideal far a cammunity rase garden. Additian af a picnic shelter wauld imprave the present use as a picnic area. A few mare benches and ather passive recreatian amenities shauld be installed. General maintenance af plant material is alsa needed.	4.1 ACRES	NP			2								6		10		
LINDLEY PARK Gently rolling slapes and seeded apen areas cambine ta make Lindley Park a very pleasant place far general recreatian use. An old park, with well-established vegetatian and natural areas as well as twa pands, the area is patentially ane af the mast attractive parks in Bozeman. The additian af buffer strips af plants (especially alang Cypress Avenue), picnic facilities, a shelter, and a restraam are needed. The partian af the park presently leased fram the railraad shauld be abtained by the city.	12.6 ACRES	NP			2								2	24			12
NORTH GRAND AVENUE Entirely develaped with ballfields (mast in need af repairs) and an American Legian hausing praject, this park needs special attentian fram every aspect.	5.4 ACRES	NP		2	2		1										
SOUTHSIDE PARK Highly develaped far recreatian use, this park needs complete recanditianing and landscape develapment. In additian, the sautheast carner, naw privately awned, shauld be acquired.	2.4 ACRES	NP			2			1	1	3	1					1	19

*CLASSIFICATION
PL – PLAYLOT
RP – REGIONAL PARK
CP – COMMUNITY PARK
NP – NEIGHBORHOOD PARK

* * PLAYGROUND EQUIPMENT
DENOTES TOTAL PIECES OF
EQUIPMENT IN EACH PARK.

BOZEMAN'S UNDEVELOPED PARKLAND

PROPOSED FACILITIES

PARK NAME	SIZE	CLASSIFICATION *	RECREATION BLDG.	OFF-STREET PARKING	MULTI-PURPOSE PAVED AREA	ATHLETIC FIELDS	PLAYGROUND APPARATUS	TENNIS COURTS	CREATIVE PLAYGROUND	ICE SKATING AREA	NATURAL AREAS	PICNIC FACILITIES	RESTROOM FACILITIES	COASTING HILL (if possible)	SPECIAL FEATURES	** DEVELOPMENT COSTS
KIRK PARK Located in a rapidly growing residential district, Kirk Park is serving an area where park facilities are badly needed. Presently under development through Land and Water Conservation Act funds, Kirk Park should be enlarged when adjoining property to the west is subdivided.	12.3 ACRES	CP	●	●	●	●	●	●	●	●	●	●	●	●		$64,000
LANGOHR PARK Located near eight acres of school property, Langohr Park would come closer to meeting the needs of the people if it were consolidated with, and developed in conjunction with, the school acreage. Combining these tracts of land would enable development of a community park, which, in this rapidly developing residential area, will be required.	8.9 ACRES	CP	●	●	●	●	●	●	●	●	●	●	●	●		$72,000
HYALITE PARK AREA This park falls into a special category because the residential development surrounding it limits access to it and restricts its suitability for development. The park serves relatively few residents, and therefore should be developed by means of a neighborhood association or special improvement district.	41.8 ACRES	NP			●	●	●		●			●	●			$121,000
OLD ELKS COUNTRY CLUB The area has great potential for development as a community park in the future. A master plan should be prepared for development of the park in conjunction with unused cemetary properties.	24.0 ACRES	CP	●	●	●	●	●	●	●	●	●	●	●	●		$145,000
WESTRIDGE ADDITION- NORTH & SOUTH There are three small dedicated parks in Westridge Addition. These two are within the interior of blocks and primarily serve only the adjacent properties. Therefore, the north and south parks should be developed and maintained by special improvement districts or neighborhood associations.	3.2 ACRES	NP			●	●	●		●			●	●			$22,000
WESTRIDGE ADDITION-EAST This park is larger than the north and south parks, and can be developed as a neighborhood park. An attempt should be made to acquire more property to meet the criteria of a neighborhood park.	2.5 ACRES	NP			●	●	●		●			●	●			$15,400
NORTH NINTH AREA Five additional acres of land to the east must be obtained to develop this small park to its full potential. The park has a small creek running through it and would serve best as a passive recreation area with limited picnic and play facilities.	2.2 ACRES	NP			●	●	●		●			●	●			$42,300

*CLASSIFICATION

PL- PLAYLOT — CP - COMMUNITY PARK

RP- REGIONAL PARK — NP - NEIGHBORHOOD PARK

**

Developement costs are approximate and in accordance with costs as indicated in Appendix "A". Land costs are not included here.

types, as well as picnic and campgrounds. Hyalite Lake at the head of Hyalite Canyon is large enough for boating and good lake fishing. Bridger Bowl near Bozeman is a major ski area that attracts skiers from throughout the state and nation.

Bozeman Hot Springs, a private development east of Bozeman, should also be noted for its recreational significance to the region. The springs produce approximately 500,000 gallons of hot water per day. The development at present includes an indoor pool, roller skating rink, and a newly constructed campground. Future plans include reconditioning of existing pool and roller rink, expansion of the campground, construction of an outdoor pool, pitch and putt golf course, recreation buildings, and cabin sites.

Even with these regional recreational activities we still feel Bozeman needs to plan for a regional park. The opportunities afforded outside the jurisdictional area as outlined are not necessarily always convenient or available to all the citizens either because of monetary or time limitations. All citizens should have an area in which they can conveniently and economically enjoy the types of activities provided for in a regional park. Being a part of the city park system is the best way to provide for it.

FINANCING

As stated in the beginning of this report, Bozeman has not spent one dime on capital improvements for its parks since 1937. All of the monies over the years since 1937 have been needed and spent on maintenance and upkeep of existing developments.

At present, the only source of revenue for park development in Bozeman is collecting a maximum six (6) mill levy on property. This maximum six mill levy is the only legal source of money specifically earmarked for parks. The total amount of money generated by this six mill levy in the 1966-67 fiscal year amounted to $55,045.00. The amount of money raised each year from this maximum mill levy has risen at the rate of about 10-15 percent per year over the past three years due to population growth and increase in property value. The increased use of the

park facilities, as well as increased cost of maintenance and upkeep of the old facilities, has risen equally as fast. With these maintenance cost increases there is no money available under the present limitations of six mills for capital improvement or development of the parks.

Park lands acquired by the city or county come mostly from lands dedicated when subdivisions are platted. Sometimes these lands are felt not to be required or too insignificant, so cash in lieu of land is paid by the subdivider. At present, there is between $6,500 and $7,000 cash on hand for acquisition from the monies paid in lieu of land. Such funds must be used for land acquisition only.

Kirk Park is presently being developed with funds raised through creation of a special neighborhood improvement district, created within the city limits under Montana laws. An amount of $32,000 was raised to match a $32,000 grant from the Land and Water Conservation Act funds through the Montana Fish and Game Commission and the Bureau of Outdoor Recreation. This was the first special park district created in Bozeman.

Indications are that maintenance, land, and operational costs of the parks in Bozeman will continue to rise. The rise in costs will most likely equal or exceed the continued increase in population and property valuation. While Bozeman will continue to grow and probably be able to acquire some additional lands for parks, there will be no monies available under present statutes and administrative procedures for development. Some other sources of funds for development must be found than those presently available.

RECOMMENDATIONS

As already indicated there are shortcomings in Bozeman's existing park system if it is even going to meet the needs of today's population. It should be stressed that the order of these recommendations are not intended as a priority for development and that no opportunity should overlooked or passed up to acquire new lands for park purposes, if they will fit into the long-range plan for future parks. Often, if action is not taken when opportunities present themselves, they can be lost forever.

WEST Y

park facilities, as well as increased cost of maintenance and upkeep of the old facilities, has risen equally as fast. With these maintenance cost increases there is no money available under the present limitations of six mills for capital improvement or development of the parks.

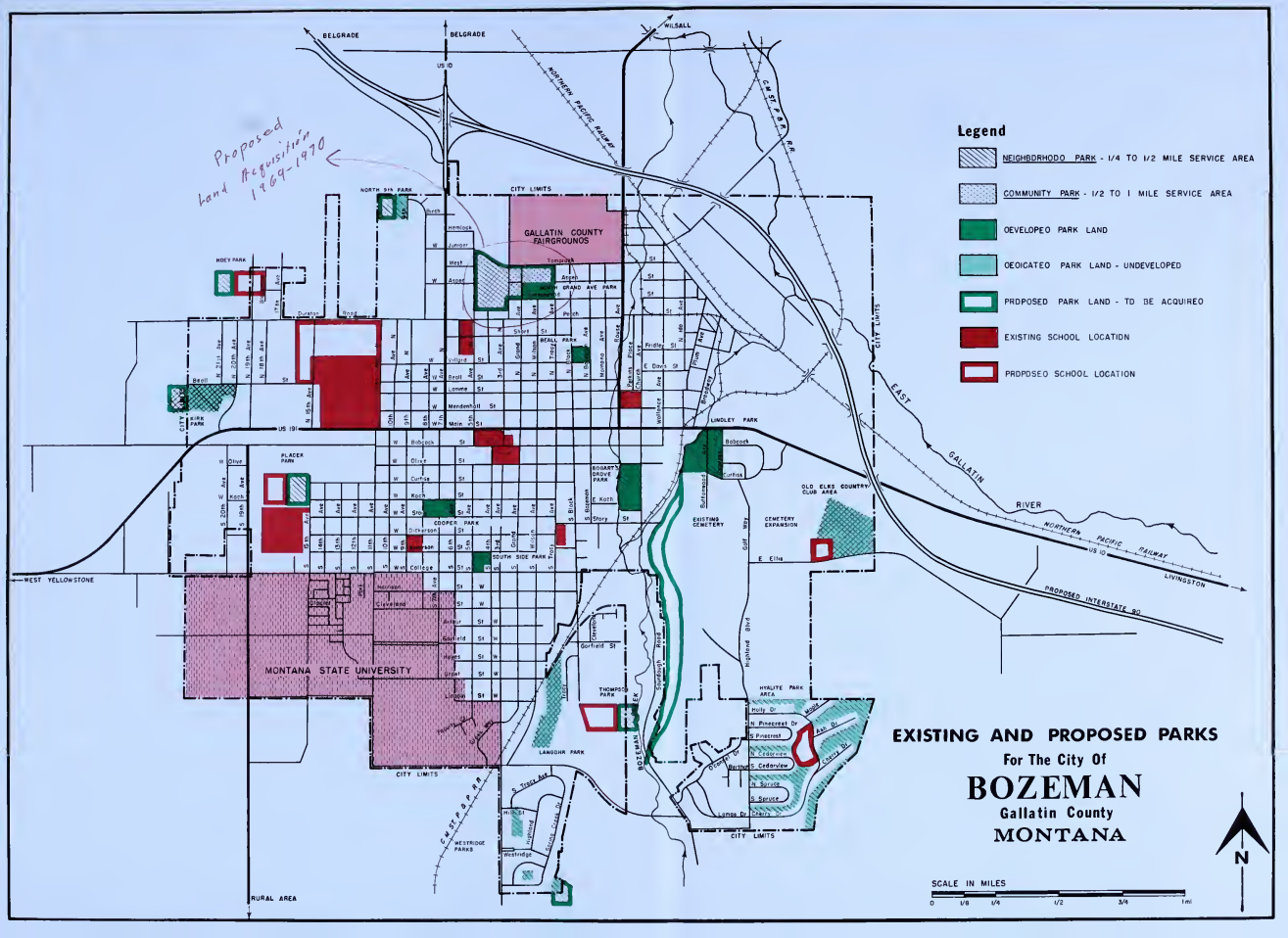
Park lands acquired by the city or county come mostly from lands dedicated when subdivisions are platted. Sometimes these lands are felt not to be required or too insignificant, so cash in lieu of land is paid by the subdivider. At present, there is between $6,500 and $7,000 cash on hand for acquisition from the monies paid in lieu of land. Such funds must be used for land acquisition only.

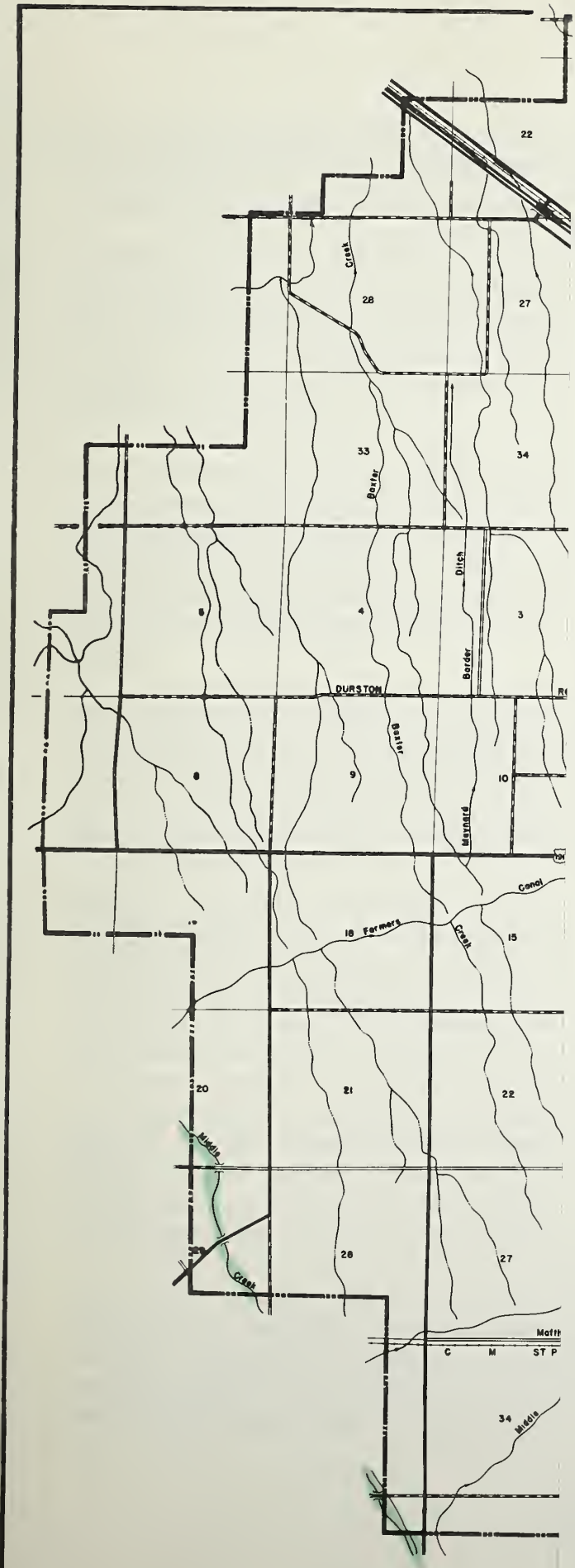
Kirk Park is presently being developed with funds raised through creation of a special neighborhood improvement district, created within the city limits under Montana laws. An amount of $32,000 was raised to match a $32,000 grant from the Land and Water Conservation Act funds through the Montana Fish and Game Commission and the Bureau of Outdoor Recreation. This was the first special park district created in Bozeman.

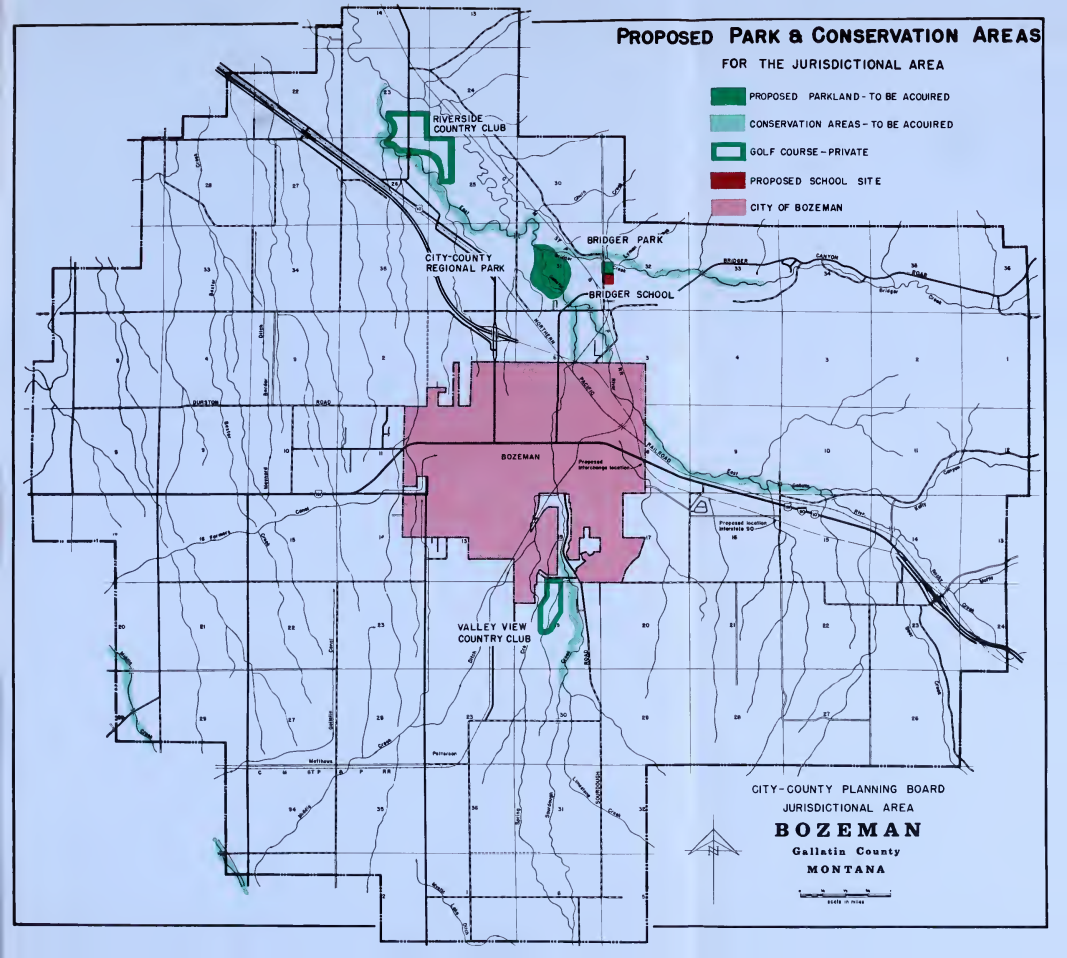
Indications are that maintenance, land, and operational costs of the parks in Bozeman will continue to rise. The rise in costs will most likely equal or exceed the continued increase in population and property valuation. While Bozeman will continue to grow and probably be able to acquire some additional lands for parks, there will be no monies available under present statutes and administrative procedures for development. Some other sources of funds for development must be found than those presently available.

RECOMMENDATIONS

As already indicated there are shortcomings in Bozeman's existing park system if it is even going to meet the needs of today's population. It should be stressed that the order of these recommendations are not intended as a priority for development and that no opportunity should overlooked or passed up to acquire new lands for park purposes, if they will fit into the long-range plan for future parks. Often, if action is not taken when opportunities present themselves, they can be lost forever.


Proposed Land Acquisition 1969-1970
Legend
NEIGHBORHOOD PARK - 1/4 TO 1/2 MILE SERVICE AREA
COMMUNITY PARK - 1/2 TO 1 MILE SERVICE AREA
DEVELOPED PARK LAND
DEDICATED PARK LAND - UNDEVELOPED
PROPOSED PARK LAND - TO BE ACQUIRED
EXISTING SCHOOL LOCATION
PROPOSED SCHOOL LOCATION
EXISTING AND PROPOSED PARKS
For The City Of
BOZEMAN
Gallatin County
MONTANA
SCALE IN MILES
0 1/8 1/4 1/2 3/4 1mi
N
BELGRADE
US 10
NORTHERN PACIFIC RAILWAY
W. WILSALL
C.M.ST.P.&P. R.R.
CITY LIMITS
NORTH 5th PARK
GALLATIN COUNTY FAIRGROUNDS
GRAND AVE PARK
HOEY PARK
BEALL PARK
CITY PARK
US 191
LINDLEY PARK
PLACER PARK
BOGART GROVE PARK
COOPER PARK
SOUTH SIDE PARK
EXISTING CEMETERY
CEMETERY EXPANSION
OLD ELKS COUNTRY CLUB AREA
EAST GALLATIN RIVER
NORTHERN PACIFIC RAILWAY
US 10
LIVINGSTON
PROPOSED INTERSTATE 90
WEST YELLOWSTONE
MONTANA STATE UNIVERSITY
THOMPSON PARK
LANGOHR PARK
HYALITE PARK AREA
SOUTH 19th AVE
CITY LIMITS
E.M.ST.P.&P. R.R.
WESTRIDGE PARKS
RURAL AREA


22
28
27
33
34
Baxter
Ditch
4
3
Border
DURSTON
9
10
Maynard
Canal
18 Farmers
Creek
15
20
21
22
Middle
28
27
Creek
C M ST P
34
Middle


PROPOSED PARK & CONSERVATION AREAS
FOR THE JURISDICTIONAL AREA
PROPOSED PARKLAND - TO BE ACQUIRED
CONSERVATION AREAS - TO BE ACQUIRED
GOLF COURSE - PRIVATE
PROPOSED SCHOOL SITE
CITY OF BOZEMAN
RIVERSIDE COUNTRY CLUB
CITY-COUNTY REGIONAL PARK
BRIDGER PARK
BRIDGER SCHOOL
BOZEMAN
Proposed interchange location
Proposed location interstate 90
VALLEY VIEW COUNTRY CLUB
CITY-COUNTY PLANNING BOARD
JURISDICTIONAL AREA
BOZEMAN
Gallatin County
MONTANA

A. Utilize All Existing Statutes to Raise the Amount of Monies Available and Allow for Development and Administration of Parks both Inside the City and in the County within the Jurisdictional Area

Under Section 11-2202 of the Revised Codes of Montana, it is possible for cities to create special improvement districts for the development and maintenance of parks. Section 16-1601 provides for rural special improvements for "such other special improvements as may be petitioned for", which we assume could allow for parks.

The city and county should confirm the intent of both these sections, especially the rural provision. If the law is interpreted correctly and it is possible to establish rural improvement districts, then consideration should be given to creating improvement districts to develop and maintain neighborhood parks outside the city limits and within the jurisdictional area.

It should be noted that under these statutes land cannot be acquired but only developed and maintained. Acquisition will have to continue to come from the dedication by developers or other provisions of the state laws that might allow for it. We could find none in our investigation.

Under Corporation Laws, Section 15-104, Revised Codes of Montana, 1947, there is a provision that allows for the forming of a coporation to maintain public parks. Since the law does not provide for financing such corporations, it is assumed that financing would presumably be by a private corporation. This section, we feel, allows for the establishment of neighborhood or home owners' associations which could then develop parklands under special leasing arrangements with the city or county. There is no reason these home owners' associations could not form, raise money, give it to the city, and allow the city to develop and maintain the parks within the limitations of the neighborhood so designated by the association.

Under the codes dealing with the powers of the county commissioners (Section 16-1008A), it is provided that the commissioners can create a park commission similar to the city park commission. In Sections 62-101 and 62-102 of the Revised Codes of Montana of 1947 a limit of $5,000 per year is set for rural park expenditures, but it

applies to maintenance only. The sections specifically state: "Except as otherwise provided by law there are no restrictions on expenditures for the purpose of acquiring and equipping county parks, unless there is some restriction other wise provided by law." It would appear from our research that the county commissioners can expend any amount from the general fund for acquiring and equipping or developing county parks.

It would appear that for park areas lying outside of the city limits there might be a possibility of acquiring funds for both development and maintenance through the county commissioners. Since urban residents, as well as rural residents, are county taxpayers, and since a good majority of the county's population reside within the City-County Planning Board's jurisdictional area, it is only fair that consideration be given by the commissioners towards assisting in the development of community, and especially regional parks that serve these people.

B. The City-County Planning Commission Initiate and Pursue Action Towards Finding Alternate Methods to Increase Amounts of Money Available for the Acquisition, Development, and Maintenance of Parks Both within the City and outside the City within the Jursidictional Area

We briefly outlined in our previous recommendation possible means of acquiring additional ways of financing park development under existing statutes. Even so, limitations as set forth by existing rural and urban state statutes give little hope that adequate funds would be available to carry out an adequate program as suggested in this report.

In order to generate monies to carry out a program of any consequence, some means must be found to increase the sources of revenue. There are three basic approaches to accomplishing this.

1. Work for enactment of special legislation that would raise the mill levy cities and counties could collect for parks and increase monies the county commissioners can spend for development and maintenance of parks.

   Under this method, and having separate city and county parks and park commissions, it would be possible that some agreement

could be worked out so that the city would develop, maintain, and administer those county parks within the jurisdictional area with funds provided partly by the county. Such a program would allow joint development of parks within present administrative and legal government entities.

2. An alternative method would require special legislation by the state. This method would provide for creating a park district within the jurisdictional area of the city-county planning commission. It would be administered and financed similar to a school district. Its taxing limitation, of course, would be set by law as well as its powers. It would in effect be creating another independent taxing body which we do not particularly like to recommend, but the need for joint development of parks and equitable spreading of the cost to all those who use the parks is so great, we felt compelled to suggest it as an alternate means of accomplishing the fact.

3. If additional or more equitable tax revenues for park development cannot be obtained as recommended above, then development and maintenance of neighborhood parks, playlots, or any other specialized parks serving only a small or special segment of the population should be financed through special improvement districts, or neighborhood associations. This method has proven to be feasible in other parts of the country and within the city limits as in the case of Kirk Park.

   Developing these limited use park areas under special improvement districts would allow for general park revenues of both the city and the county to be spent on conservation areas, community parks, and the regional park, etc., which serve and benefit the community as a whole.

There might be other ways or means to increase revenues and accomplish development needed to provide citizens of Bozeman with adequate parks. Whatever that fair and equitable method is will be decided only through positive action, research and discussion. Something has to be done, monies must be raised, areas outside the town must be developed, and the cost must be spread out to all those citizens who use and benefit from the parks. Those outside the city limits cannot in all fairness continue to utilize and benefit from parks which are overtaxed partially because of use by them and paid for only by the city residents.

C. Full Use of All Federal Programs for Acquisition, Development, and Landscaping of Parks and Open Spaces Throughout the City

Many Federal programs are available for a variety of ways to improve the appearance of a city and increase its open space and parklands. A brief summary of the programs applicable to Bozeman is contained in the appendix of this report. Many of the programs depend on location, initiative, and monies already invested or able to be raised.

It appears that at present Bozeman's only use of Federal participation is under the Land and Water Conservation Fund Act. The Kirk Park special improvement district took advantage of this program as already mentioned. If some method is found, as recommended above, to increase monies for park development, other programs could be utilized.

One action the planning board could take would be to encourage civil or fraternal groups and service clubs to give the monies they would normally spend on park or improvements projects to the city or county to use as public funds in matching Federal funds. The aim of the matching clauses in most of the government programs is to encourage such civic initiative and not just create hand-outs.

D. Set Up Citywide Program for Planning and Maintenance of Street Trees

One of Bozeman's distinguishing characteristics in the older portions of town is its trees. The abundance of trees is evidence of concern for the appearance and environment of the town by earlier citizens. There is less evidence in new sections of town that people are concerned and are following their forefathers example by planting trees. In addition, the mature trees in the older section of town show need for more professional and concerted effort of maintenance.

Since planting of street trees often is done on city right-of-way and maintenance requires skill and knowledge, it is recommended that it be a city responsibility. The responsibility should come under the park department, since they are generally concerned and more properly equipped to handle care of trees.

Since financing would be impossible under even increases in park revenues, it is recommended that such a street tree program be financed by a neighborhood or possibly a citywide improvement district similar to street lighting districts.

E. No Park or Open Space Should Be Developed in Any Part without First Completing a Long-Range Comprehensive Development Plan for the Area

Only through the preparation of a master plan for a park can all facets of its physical characteristics and potentials of development be explored. Many dollars in the past have been unwisely spent in parks by poor location of facilities. By preparing such a plan as a guide for development, any portion of the facilities in the park can be built with the full knowledge that it will not have to be moved, relocated or replaced in the future because it is in the way of another facility.

F. Provide a Community Indoor-Outdoor Swimming Pool Facility

Bozeman's only existing outdoor municipal swimming pool, located in South Park, has reached its saturation point. A new municipal indoor-outdoor pool located adjacent to the junior and senior high school would allow for winter use during the school day by the schools, and public use during the summer, weekends, and evenings.

An indoor-outdoor pool is now under consideration by the city. It would be financed by a bond issue. It would be located on school property with maintenance by the city. Financing for maintenance and upkeep would be able to be financed out of revenues and leases for pool use by the school, the city, and the public.

G. As Soon as Revenues or Actions Recommended in this Report Allow for the Financing of Park Development Immediate Action Should First be Taken to Acquire High Priority Properties for Parks and Development of Existing Parks as Recommended in this Report and Shown on the Park Plan

The park plan which follows this section graphically illustrates and locates suggested park acquisition and expansion. It should

be noted that a number of proposed neighborhood parks are recommended for development in conjunction with future schools. This is consistent with the recommendation of the National Recreation and Parks Association. After all, schools are child oriented and neighborhood parks should be also.

The location of these future school sites is based on a report by Berg-Grabow, Associate Architects, prepared for the school board. Whatever the final location of the schools might be, every effort should be made to acquire adjacent neighborhood parkland, and at the same time the school board purchases any land for schools. It is also recommended that joint master planning of the school park complex be carried on during the design of the school to afford maximum and economical joint use of the land and facilities. Other park locations not in conjunction with schools are based on either the physical characteristics of the site or projected population and movements together with considerations of access based on the arterial street projections.

Refer to the following section on Capital Improvement Needs for recommended project priority and costs.

H. Zoning Changes Should Be Considered and Formulated to Restrict Adverse Development of Areas that Are Natural Drainages, Steep Areas, Etc., to Assure They Will Be Preserved and Used for Open Space, Recreation, or Agricultural Purposes

An example of good utilization of this type of land for recreation use is the golf course located along Bozeman Creek. Zoning for such use prevents destruction of the natural stream-flow and provides increased value of lands paralleling the stream.

I. Continued Cooperation with Montana State University in Their Planning for Open Space and Recreation Facilities Should be an Important Element of the City's Park Program

Montana State University exerts a very important influence and some pressures on the city park and recreation areas. This is especially true of off-campus student residents, and married students and their families.

J. A Conscientious Effort Should Be Made to Beautify and Create More Pleasant Business Districts and the Approaches to Them

Many people spend the greater part of each day in the business districts of Bozeman, yet they are perhaps the most unappealing areas of the city. Several positive steps have been made towards creating a more pleasant environment in the central business district, such as the new municipal building, the bank building, and the Montana Power Company office building. Set back from the street, providing landscape development, these buildings are more pleasant to view and bring a bit of refreshing greenery into an area that is completely devoid of open space except concrete and blacktop. If each structure in the downtown business district, when replaced, relocated, or remodeled, were given the same consideration, downtown Bozeman would be, in 20 to 30 years, as pleasant as some of its residential areas.

Efforts should be made to provide landscape development of the interchanges on Interstate 90, as well as the approaches to the city from these interchanges. It must be remembered that a visitor's opinion of a city is greatly influenced by his first impression. Ample open space and landscape development creates not only a more favorable attitude of the visitor to the city, but instills a greater sense of civic pride in the residents of the city.

CAPITAL IMPROVEMENT NEEDS

Assuming that some means of generating additional revenues will be worked out, this section will set forth capital improvement costs, needs, and a suggested priority. These costs can serve as a guideline to determine extent of funds needed under the various recommendations for raising additional revenues for park development and maintenance. Costs shown for each park are based on recommendations for development contained in the section entitled Existing Parks and Future Needs.

Improvement Cost of Existing Developed Parks*

Beall Park

Replace existing fence - 1,100 linear feet	$ 5,500.00
Resurface tennis court	2,000.00
Reseeding and landscaping	4,000.00
Sprinkler system	3,000.00
Upgrade existing equipment	1,500.00
Total for Beall Park	$16,000.00

Bogert's Grove Park

Resurface tennis courts	$ 6,000.00
Stream bank improvement	1,000.00
Reseeding and landscaping	4,000.00
Sprinkler system	7,000.00
Total for Bogert's Grove	$18,000.00

Cooper Park

Improve walks	$ 3,600.00
Improve lighting system	3,000.00
Picnic shelter and tables	5,000.00
Total for Cooper Park	$11,600.00

Lindley Park

Permanent restroom facilities	$ 7,500.00
Picnic shelter and tables	5,000.00
Sidewalk	2,500.00
Landscaping	3,000.00
Total for Lindley Park	$18,000.00

South Side Park

Upgrade existing equipment	$ 1,500.00
New backstop	1,000.00
Reseeding and landscaping	3,000.00
Sprinkler system	3,000.00
Resurface tennis courts	6,000.00
Total for South Side Park	$15,500.00

Total for Existing Parks	$78,600.00

(*) North Grand Avenue expansion and development costs are listed in the Proposed Land Acquisition and Development Costs.

Land Acquisition and Development Costs for Park Expansion

Indoor-Outdoor Swimming Pool

Recommended site would be on school property between the senior and junior high schools, cost reflects the reconditioning of the existing city pool (cost figure obtained from Swimming Pool Master Plan - 1966)	$600,000.00

City-County Regional Park

Obtain 150 additional acres at $1,000/acre	150,000.00

North Grand Avenue Park Expansion

Obtain 18.2 acres at $3,000/acre	54,600.00
Obtain land adjacent ot west side of the park	140,000.00
Park development including lighted ballfield and related facilities	236,500.00

North Ninth Area

Obtain 5 additional acres to the west at $3,000/acre	15,000.00

Sourdough Road Area

Obtain and leave in its natural condition approximately 30 acres at $600/acre	18,000.00

Future Parks in Conjunction with Schools as Shown on Plan

Bridger Park

5 acres at $1,000/acre	$ 5,000.00

Hoey Park

5 acres at $2,000/acre	10,000.00

Placek Park	
5 acres at $2,000/acre	$10,000.00
Thompson Park	
5 acres at $3,000/acre	15,000.00

PROJECT PRIORITY

This report is meant to serve as a guide through 1980 for a park system for the City of Bozeman. Realizing Bozeman's financial limitations, only certain of the proposed projects can be accomplished in a given number of years. It is therefore necessary to assign an order of importance to these projects. The following list of projects is in our opinion the relative importance of each to the park system as a whole.

As pointed out before, unforeseen events and opportunities may arise that would make it advantageous to undertake one project ahead of another in the list.

Kirk Park
Improvement of Existing Parks
Indoor-Outdoor Swimming Pool
Langhor Park
North Grand Avenue Park
North Ninth Area
Hyalite Park
Westridge Parks
Old Elks Country Club Parks

Land acquisition should always be high in priority due to the ever increasing land values. Proposed Neighborhood Park locations are shown on the City of Bozeman Existing and Proposed Parks map. These sites should be obtained, whenever possible, when school sites are purchased.

Relation to Arterial Plan

It should be pointed out that the location of the proposed Hoey elementary school site and Hoey Park shown on the plan is in conflict with an important Arterial Streets Plan recommendation. The northerly extension of Nineteenth Avenue as a portion of a circumferential primary arterial would bisect the site. This school site was proposed by a consultant to the Bozeman School District #7 in a study published after the Arterial Streets Plan had been prepared and which came to our attention after the Arterial Plan was approved. Since vacant land is available to the west, it is recommended that the proposed park and school site be moved to the west of Nineteenth Avenue.

ZONING MAP
PLANNING AREA OUTSIDE BOZEMAN

ZONING MAP

PLANNING AREA OUTSIDE BOZEMAN

A zoning map was prepared showing proposed zoning districts for the planning area outside the city limits. Essentially, the map is an extension of the existing city zoning districts and regulations to cover the area of jurisdiction of the City-County Planning Board. The zoning map is a guide to the application of Montana Statutes (11-3840) which permit control of development by an incorporated area of the land within a specified jurisdictional area surrounding the city.

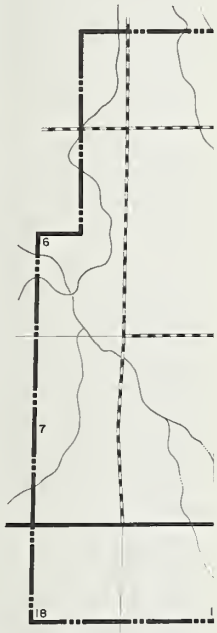
The zoning map, illustrated on figure 13, was based on existing land uses within and outside the city, existing zoning within the city, and on what future demands for land could be determined without the benefit of a land use plan or an economic study. A population projection, which was made by the consultant as a basis for determining future needs for arterial and parks planning, was also used in the preparation of the zoning map.

Ideally, the zoning ordinance and map perform the function of putting into legal terms the city's and county's objectives with respect to land use planning. They are tools for carrying out the land use plan. However, since no land use plan has been prepared for the city or the surrounding jurisdictional area, the zoning map presented here is an attempt to organize the existing land uses into applicable districts, while giving as much consideration as possible to desirable directions and densities of future development. An attempt has been made to do more than perpetuate the existing land use pattern.

The residents and property owners of an area adjacent to the west city limits of Bozeman requested that a special zoning district be instituted to control future development in their area, and prepared a listing of zoning measures they would like to see instituted. As much consideration as possible was given to the zoning recommendations prepared by this group of citizens.

However, some of their recommendations could not be handled under the existing zoning ordinance, and others were not in keeping with future land use needs in the area.

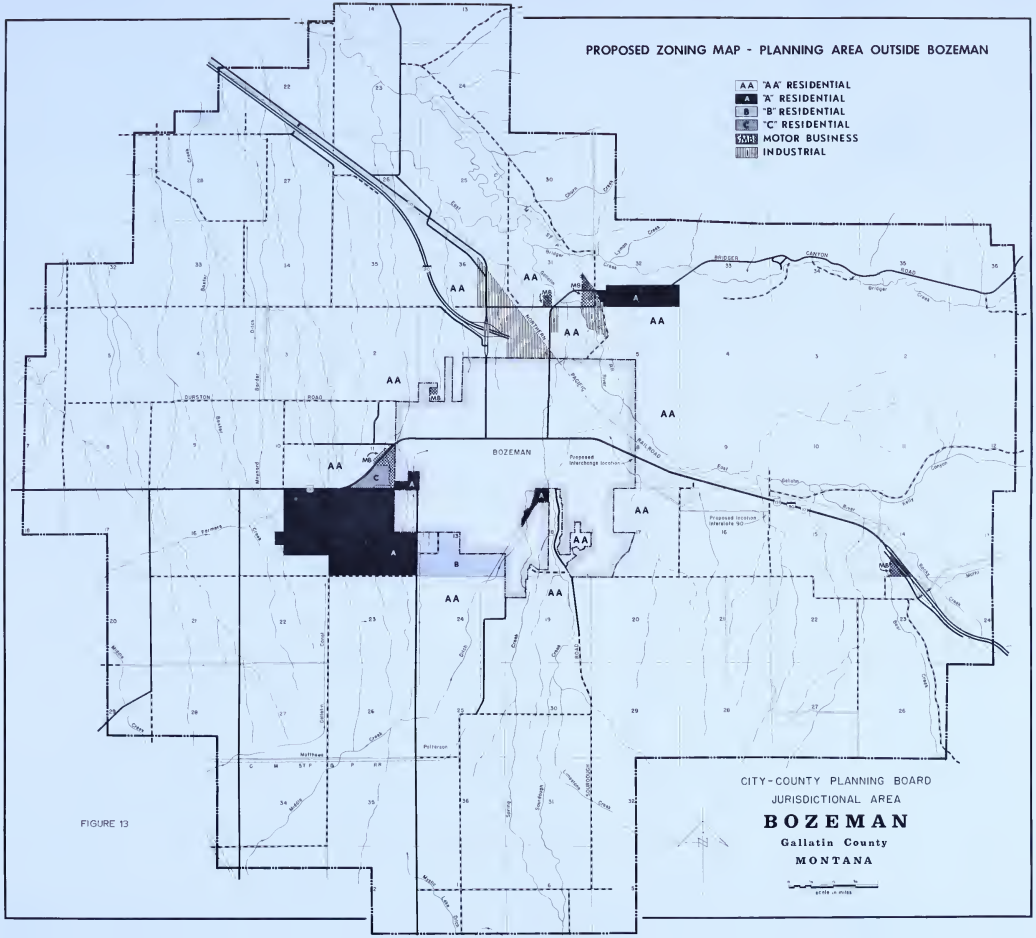
It is recommended that a land use plan be prepared for the entire planning area, based on an economic study of the area, and on the planning studies included in this report. It is also suggested that the zoning ordinance and zoning maps for the entire Bozeman planning area be revised in accordance with the plan for land use.



FIGUF

However, some of their recommendations could not be handled under the existing zoning ordinance, and others were not in keeping with future land use needs in the area.

It is recommended that a land use plan be prepared for the entire planning area, based on an economic study of the area, and on the planning studies included in this report. It is also suggested that the zoning ordinance and zoning maps for the entire Bozeman planning area be revised in accordance with the plan for land use.


PROPOSED ZONING MAP - PLANNING AREA OUTSIDE BOZEMAN
AA "AA" RESIDENTIAL
A "A" RESIDENTIAL
B "B" RESIDENTIAL
C "C" RESIDENTIAL
MB1 MOTOR BUSINESS
INDUSTRIAL
BOZEMAN
Proposed Interchange location
Proposed location Interstate 90
BRIDGER CANYON ROAD
BOZEMAN ROAD
RAILROAD
CITY-COUNTY PLANNING BOARD
JURISDICTIONAL AREA
BOZEMAN
Gallatin County
MONTANA
FIGURE 13